

Third Chronological Supplement to the Carcinogenic Potency Database: Standardized Results of Animal Bioassays Published through December 1986 and by the National Toxicology Program through June 1987

by Lois Swirsky Gold,* Thomas H. Slone,* Georganne M. Backman,* Susan Eisenberg,* Maria Da Costa,* Michael Wong,* Neela B. Manley,* Lars Rohrbach,* and Bruce N. Ames[†]

This paper is the third chronological supplement to the Carcinogenic Potency Database that first appeared in this journal in 1984 (1-4). We report here results of carcinogenesis bioassays published in the general literature between January 1985 and December 1986, and in Technical Reports of the National Toxicology Program between June 1986 and June 1987. This supplement includes results of 337 long-term, chronic experiments of 121 compounds, and reports the same information about each experiment in the same plot format as the earlier papers, e.g., the species and strain of animal, the route and duration of compound administration, dose level, and other aspects of experimental protocol, histopathology, and tumor incidence, TD₅₀ (carcinogenic potency) and its statistical significance, dose response, opinion of the author about carcinogenicity, and literature citation. The reader needs to refer to the 1984 publication for a guide to the plot of the database, a complete description of the numerical index of carcinogenic potency, and a discussion of the sources of data, the rationale for the inclusion of particular experiments and particular target sites, and the conventions adopted in summarizing the literature. The four plots of the database are to be used together as results published earlier are not repeated. In all, the four plots include results for approximately 4000 experiments on 1050 chemicals. Appendix 14 of this paper is an alphabetical index to all chemicals in the database and indicates which plot(s) each chemical appears in. A combined plot of all results from the four separate papers, that is ordered alphabetically by chemical, is available from the first author, in printed form or on computer tape or diskette.

Background

Development of the Carcinogenic Potency Database (CPDB) began a decade ago, when efforts to use animal bioassays to analyze the carcinogenic process

in rodent experiments and to evaluate possible hazards to humans were hampered by the lack of a standardized method of comparing test results. Experimental protocols as well as the type of information reported in the literature are quite diverse, and this large body of information was underused. Moreover, quantitative estimates of carcinogenic potency with a single measure had not been made for the large number of substances that had been tested chronically in rodents; such a measure is required to compare rodent potency to other factors such as mutagenicity, teratogenicity, chemical structure, and

*Biology and Medicine Division, Lawrence Berkeley Laboratory, Berkeley, CA 94720.

[†]Department of Biochemistry, University of California, Berkeley, CA 94720.

Address requests for reprints, combined plots, and computer tapes to L. S. Gold, Biology and Medicine Division, Lawrence Berkeley Laboratory, Berkeley, CA 94720.

human exposure. The CPDB provides a standardized resource of both qualitative and quantitative information on the literature of chronic, long-term cancer tests (1-3), including results published in the general literature and in Technical Reports of the National Cancer Institute/National Toxicology Program (NCI/NTP). This is the fourth paper to present a portion of the CPDB in plot format. The first two papers in 1984, Gold et al. (1) and Peto et al. (4), included the published literature through June 1981, a description of our numerical index of carcinogenic potency (TD_{50}), and the statistical procedures adopted for estimating it from experimental data. Briefly, TD_{50} may be defined as follows: for a given target site(s), if there are no tumors in control animals, then TD_{50} is that chronic dose rate in mg/kg body weight/day that would induce tumors in half the animals tested at the end of a standard lifespan for the species. Since the tumor(s) of interest often does occur in control animals, TD_{50} is more precisely defined as that chronic dose rate that will halve the probability of remaining tumor-free throughout the standard lifespan of the species (4,5). The range of significant TD_{50} values for carcinogens in the CPDB is more than 10 millionfold.

A detailed guide to the plot of the database was included in the 1984 paper (1); it described the contents, field by field, and discussed the sources of data, the criteria for the inclusion of particular experiments and particular target sites, and the conventions adopted in summarizing the literature. The second (2) and third (3) plots were chronological supplements, and the current plot covers general literature published in 1985 and 1986 as well as NTP Technical Reports between June 1986 and June 1987. It is our intention that the four plots be used together, and that readers who are not familiar with the CPDB will first read the 1984 papers when using the plot in this paper. We have not duplicated earlier results, and thus for complete data on each chemical that appears in more than one plot, all four publications are necessary.

Each plot of the database provides the same set of information about each experiment in the same format, including: the species, strain, and sex of animal tested; features of the experimental protocol such as route of administration, duration of dosing, dose level in mg/kg body weight/day, and duration of experiment; histopathology and tumor incidence; carcinogenic potency and its statistical significance; shape of the dose-response curve; opinion of the author as to the carcinogenicity; and literature citation. A word of caution is necessary about the limitations of the database. We have included only long-term tests of individual compounds that fit a set of criteria compatible with calculating potency; many animal cancer tests are excluded. Moreover, we have not attempted to evaluate whether or not a compound is a carcinogen; rather, we report the published opinions of the investigators whose data we present, as well as the statistical significance of the TD_{50} calculated from

their results. Further discussion of the criteria for the database and the limitations can be found in (1).

In this fourth plot, the author's opinion column for the NTP bioassays reflects a new set of interpretive categories that NTP adopted in 1983 and redefined in 1986. Two of the categories are considered positive by NTP. We report the NTP evaluations using the codes "c" for clear evidence of carcinogenic activity; "p" for "some evidence of carcinogenic activity" in an experiment that is positive but where the strength of the response is less than that required for clear evidence; "e" for equivocal evidence of carcinogenic activity; and "—" for no evidence of carcinogenic activity. The full definitions of the NTP levels of evidence are given in Appendix 11. For the general literature the "author's opinion" column is "+" for a positive opinion, "—" for a negative opinion; in other cases the column for the literature is blank, including unclear and borderline opinions.

The appendices to each of the four plots provide the same types of information for the data in that publication, and are given the same appendix numbers. Appendix 1 lists alphabetically the compounds included in the current plot and their common synonyms; Appendix 2 provides a list of those same compounds ordered by Chemical Abstracts Service (CAS) Registry number. The next several appendices provide codes and definitions required for using the plot: strains of test animal (Appendix 3); routes of administration (Appendix 4); sites of tumor induction (Appendix 5); histopathology (Appendix 6); notecodes (Appendix 7); dose-response curve symbols (Appendix 8); reference codes (Appendix 9); NCI/NTP bioassays evaluated as inadequate (Appendix 10); and author's opinion codes (Appendix 11). Appendices 12 and 13 give full bibliographic information for all experiments reported in this plot: the bibliography for the general literature (Appendix 12) and a list of the NCI/NTP Technical Reports (Appendix 13). Appendix 14 lists the 1053 chemicals that appear in any of the four plots, and indicates which plot contains results of experiments on each chemical; it is ordered alphabetically by chemical name and common synonym.

We are continuing to update the Carcinogenic Potency Database with papers published after 1986, and are also attempting to add earlier papers that we overlooked in our literature search. Therefore, we would appreciate information about any tests that the reader notices are missing.

Plot in This Supplement

The plot of the database below includes results of 337 long-term, chronic experiments on 121 chemicals. It reports results for 20 compounds from Technical Reports of the NTP published between June 1986 and June 1987, and results for 102 compounds published in the general literature between January 1985 and December 1986. Experiments in rats, mice, and hamsters are reported here for compounds representing a

variety of chemical classes, with a variety of uses. Some are naturally occurring substances (e.g., acetaldehyde, hydrazine, and formaldehyde); food additives (e.g., potassium bromate and butylated hydroxyanisole); industrial compounds (e.g., methylene chloride and benzene); and drugs (e.g., phenobarbital and acetaminophen). Of the 121 chemicals, 44 were also included in the first, second, or third plots, and we have flagged these with a triple asterisk (****) after the chemical name in the plot. For some substances, only a few experiments are reported here, but several experiments were previously reported, e.g., 2-acetylaminofluorene and ethyl alcohol. The TD₅₀ values for the compounds in this supplementary plot fall within the range of values reported earlier.

Analyses of the Database

Taken together, the four plots of the CPDB include more than 4000 experiments on 1050 chemicals that meet the inclusion rules of the database and are therefore suitable for estimating TD₅₀. Although the inclusion rules assure some consistency in experimental protocol, there is great diversity in the database. Most of the chemicals have been tested in rats or mice; however, some have been tested in hamsters, dogs, or monkeys. Experiments with 96 different mouse strains and 72 rat strains are included. For a given chemical, the database may contain only a single experiment or several experiments. For example, among the 788 chemicals tested in rats, 28% have only one rat test and 52% have two tests; however, 13 chemicals have more than 10 tests. Overall about half of the 1050 chemicals in the database are positive in at least one experiment according to the opinion of the published author. This proportion is similar for rats and mice.

Our group has used the CPDB to address many issues relevant to chemical carcinogenesis and inter-species extrapolation. We summarize this work below and refer the reader to the published papers.

With respect to the measurement of carcinogenic potency, two methods for estimating TD₅₀ from animal bioassays have been compared, one based on lifetable data and one based on summary incidence data (6). Second, we have shown that the potency calculated from experimental results is restricted to an approximately 30-fold range surrounding the maximum dose tested in a standard bioassay (7). Third, for chemicals that are positive in more than one test in a species, our analysis indicates that the most potent TD₅₀ value from among all positive tests is similar to other measures that average TD₅₀ values or functions of values (8). For the chemicals that induce tumors in rats or mice, we have presented a concise tabulation of the most potent TD₅₀ values and a summary of the evaluations of carcinogenicity in each sex-species group (8).

Correlation studies of carcinogenic potency have been conducted. We have discussed some tautologous

aspects of the good correlation in potency between rats and mice (7) and have reported a weak association of mutagenic potency and carcinogenic potency for 80 chemicals that are both mutagenic in *Salmonella* and carcinogenic in rats or mice (9).

Reproducibility of results in animal bioassays has been investigated in 70 "near-replicate" comparisons consisting of two or more tests of the same chemical, administered by the same route, and using the same sex and strain of rodent. Overall there was good reproducibility of positivity, target site, and TD₅₀ in rats, mice, and hamsters (10). We have described the potencies of compounds that induce tumors at particular target sites in rats and mice and have examined other indicators of a chemical's hazard including whether or not tumors were induced at more than one site in a single sex-species group of animal, whether or not tumors may have caused the death of the animal or were found at sacrifice, and whether or not metastases of induced tumors occurred (11).

We have proposed a rough index of possible carcinogenic hazard to humans, HERP, that compares for a given chemical, the chronic dose rate at which humans are exposed (mg/kg/day) to the TD₅₀ in rodents. We have computed HERP values for a variety of man-made and naturally occurring substances to which people may be exposed and have constructed a scale to rank possible hazards. This ranking suggests that carcinogenic hazards from current levels of pesticide residues or water pollution are likely to be of minimal concern relative to the background levels of natural substances, though one cannot say whether these natural exposures are likely to be of major or minor importance in human cancer (12-17). In a separate analysis we rank the potential carcinogenic hazards (PERP) permitted to U.S. workers from exposures to 41 rodent carcinogens that are regulated with Permissible Exposure Levels (PELs) by the U.S. Occupational, Safety, and Health Administration (18). For some substances, exposures at the PEL would be close to the dose rate that produces tumors in 50% of test animals.

Approximately half of the chemicals tested in rodent bioassays are positive in at least one experiment, and among chemicals tested for mutagenicity as well as for carcinogenicity in both rats and mice, three-quarters are either mutagens or carcinogens. We have discussed how representative this positive rate might be of the proportion of all chemicals that would be positive if tested in rodents, or the proportion of all chemicals that are potentially carcinogenic to humans (12,19).

The issue of extrapolating carcinogenesis results from one species to another has been addressed in an analysis of prediction between two closely related species, rats and mice. We have examined how well one can predict from rats to mice and from mice to rats, and discuss three factors that affect the accuracy of prediction: chemical class, mutagenicity, and

the dose level at which a chemical is toxic. Additionally, we have described the frequency of a carcinogenic response in each target organ and have determined the predictive value of individual target sites in one species for carcinogenicity in the second species (19).

We are continuing to calculate HERP and PERP values as we expand the CPDB and to conduct several additional analyses, e.g., the reproducibility of bioassay results when chemicals are administered by different routes, the comparison of results in rodents and monkeys, and the amounts of rodent carcinogens that occur naturally in edible plants.

Left Side of Plot

	Spe	Strain	Site	Xpo+Xpt			TD50	2Tailpvl
	Sex	Route	Hist	Notes			DR	AuOp
ASPARTAME				100ng.....1ug.....10.....100.....1mg.....10.....100.....1g.....10				
1	R f	sls	eat bra tum	52w52 ekr		>	no dre	P=1.
2	R f	sls	eat bra mix	24m24 er			no dre	P=1. -
3	R m	sls	eat bra tum	52w52 ekr		>	no dre	P=1.
4	R m	sls	eat bra mix	24m24 er			186.gm *	P<.5 -
DI(2-ETHYLHEXYL)PHTHALATE				100ng.....1ug.....10.....100.....1mg.....10.....100.....1g.....10				
5	M f	b6c	eat liv	MXA 24m24		:	:	825.mg * P<.0005c
a	M f	b6c	eat liv	hpc 24m24			1.05gm * P<.0005c	
b	M f	b6c	eat TBA	MXB 24m24			350.mg P<.003	
c	M f	b6c	eat liv	MXB 24m24			825.mg * P<.0005	
d	M f	b6c	eat lun	MXB 24m24			7.26gm * P<.07	
6	M m	b6c	eat liv	MXA 24m24			976.mg * P<.03 c	
a	M m	b6c	eat liv	hpc 24m24			1.82gm * P<.08 c	
b	M m	b6c	eat TBA	MXB 24m24			1.54gm * P<.4	
c	M m	b6c	eat liv	MXB 24m24			976.mg * P<.03	
d	M m	b6c	eat lun	MXB 24m24			no dre P=1.	
7	R f	f34	eat liv	MXA 24m24		:	:	1.11gm * P<.0005c
a	R f	f34	eat liv	hpc 24m24			2.30gm * P<.002 c	
b	R f	f34	eat liv	nnc 24m24			2.35gm * P<.02	
c	R f	f34	eat TBA	MXB 24m24			1.67gm * P<.6	
d	R f	f34	eat liv	MXB 24m24			1.11gm * P<.0005	
8	R m	f34	eat liv	MXA 24m24		:	:	1.17gm * P<.03 c
a	R m	f34	eat liv	hpc 24m24			3.36gm * P<.2 c	
b	R m	f34	eat TBA	MXB 24m24			no dre P=1.	
c	R m	f34	eat liv	MXB 24m24			1.17gm * P<.03	

Right Side of Plot

RefNum	LoConf	UpConf	Cntrl	1Dose	1Inc	2Dose	2Inc	Citation or Pathology	Brkly Code
ASPARTAME 22839-47-0								Ishii;txlt,7,433-437;1981	
1 1327m 471.mg n.s.s. 0/16 1.00gm 0/16 2.00gm 0/16 4.00gm 0/16									
2 1327n 45.8gm n.s.s. 1/60 1.00gm 0/60 2.00gm 2/60 4.00gm 0/60									
3 1327m 471.mg n.s.s. 0/16 1.00gm 0/16 2.00gm 0/16 4.00gm 0/16									
4 1327n 35.2gm n.s.s. 0/59 1.00gm 1/59 2.00gm 0/60 4.00gm 1/60									
DI(2-ETHYLHEXYL)PHTHALATE 117-81-7									
5 c52733 513.mg 1.67gm 1/50 383.mg 12/50 765.mg 18/50								liv:hpa,hpc.	
a c52733 638.mg 1.89gm 0/50 383.mg 7/50 765.mg 17/50									
b c52733 175.mg 2.07gm 20/50 383.mg 35/50 (765.mg 35/50)								liv:hpa,hpc,nnd.	
c c52733 513.mg 1.67gm 1/50 383.mg 12/50 765.mg 18/50								lun:a/a,a/c.	
d c52733 2.20gm n.s.s. 0/50 383.mg 1/50 765.mg 2/50								liv:hpa,hpc.	
6 c52733 440.mg n.s.s. 14/50 353.mg 25/49 713.mg 29/50									
a c52733 736.mg n.s.s. 9/50 353.mg 14/49 713.mg 19/50									
b c52733 413.mg n.s.s. 29/50 353.mg 37/49 713.mg 38/50									
c c52733 440.mg n.s.s. 14/50 353.mg 25/49 713.mg 29/50								liv:hpa,hpc,nnd.	
d c52733 1.97gm n.s.s. 10/50 353.mg 9/49 713.mg 7/50								lun:a/a,a/c.	
7 c52733 644.mg 2.40gm 0/50 294.mg 6/50 589.mg 13/50								liv:hpc,nnd.	
a c52733 1.12gm 5.90gm 0/50 294.mg 2/50 589.mg 8/50									
b c52733 1.11gm n.s.s. 0/50 294.mg 4/50 589.mg 5/50									
c c52733 321.mg n.s.s. 41/50 294.mg 43/50 589.mg 49/50									
d c52733 644.mg 2.40gm 0/50 294.mg 6/50 589.mg 13/50									
8 c52733 526.mg n.s.s. 3/50 235.mg 6/50 475.mg 12/50								liv:hpa,hpc,nnd.	
a c52733 1.13gm n.s.s. 1/50 235.mg 1/50 475.mg 5/50								liv:hpc,nnd.	
b c52733 455.mg n.s.s. 36/50 235.mg 35/50 475.mg 34/50									
c c52733 526.mg n.s.s. 3/50 235.mg 6/50 475.mg 12/50								liv:hpa,hpc,nnd.	

Errata in Earlier Plots

A few omissions and errors in the first plot of the CPDB (1) have come to our attention. The CAS number for D & C Red No. 10 was omitted; it should be 1248-18-6. The CAS number for 2-chloro-5-(3,5-dimethylpiperidinosulfonyl)benzoic acid was reported incorrectly; it should be 37087-94-8. The citation for Gass and Allaben (1977) was incorrect; the citation should be IRCS Med. Sci.: Libr. Compend. 5: 477 (1977). For two chemicals reported earlier, aspartame and di(2-ethylhexyl)phthalate, the dose calculation was incorrect. Therefore, other values such as the TD₅₀ were also incorrect. Below we report the corrected plot for these two chemicals.

There are many people who have provided us with valuable assistance in the course of our work. We wish to thank Jerrold Ward and Leslie Bernstein for their valuable and consistent expertise in pathology and statistics. We also thank Veronica Cabras for technical assistance.

This work was supported by NIEHS/DOE Interagency Agreement 222-Y01-AS-10066 through the Lawrence Berkeley Laboratory contract no. DE-AC03-76SF00098.

REFERENCES

- Gold, L. S., Sawyer, C. B., Magaw, R., Backman, G. M., de Veciana, M., Levinson, R., Hooper, N. K., Havender, W. R., Bernstein, L., Peto, R., Pike, M. C., and Ames, B. N. A Carcinogenic Potency Database of the standardized results of animal bioassays. *Environ. Health Perspect.* 58: 9-319 (1984).
- Gold, L. S., de Veciana, M., Backman, G. M., Magaw, R., Lopipero, P., Smith, M., Blumenthal, M., Levinson, R., Gerson, J., Bernstein, L., and Ames, B. N. Chronological supplement to the Carcinogenic Potency Database: standardized results of animal bioassays published through December 1982. *Environ. Health Perspect.* 67: 161-200 (1986).
- Gold, L. S., Slone, T. H., Backman, G. M., Magaw, R., Da Costa, M., Lopipero, P., Blumenthal, M., and Ames, B. N. Second chronological supplement to the Carcinogenic Potency Database: standardized results of animal bioassays published through December 1984 and by the National Toxicology Program through May 1986. *Environ. Health Perspect.* 74: 237-329 (1987).
- Peto, R., Pike, M. C., Bernstein, L., Gold, L. S., and Ames, B. N. The TD₅₀: a proposed general convention for the numerical description of the carcinogenic potency of chemicals in chronic-exposure animal experiments. *Environ. Health Perspect.* 58: 1-8 (1984).
- Sawyer, C., Peto, R., Bernstein, L., and Pike, M. C. Calculation of carcinogenic potency from long-term animal carcinogenesis experiments. *Biometrics* 40: 27-40 (1984).
- Gold, L. S., Bernstein, L., Kaldor, J., Backman, G., and Hoel, D. An empirical comparison of methods used to estimate carcinogenic potency in long-term animal bioassays: lifetable vs. summary incidence data. *Fund. Appl. Toxicol.* 6: 263-269 (1986).
- Bernstein, L., Gold, L. S., Ames, B. N., Pike, M. C., and Hoel, D. G. Some tautologous aspects of the comparison of carcinogenic potency in rats and mice. *Fund. Appl. Toxicol.* 5: 79-86 (1985).
- Gold, L. S., Slone, T. H., and Bernstein, L. Summary of carcinogenic potency (TD₅₀) and positivity for 492 rodent carcinogens in the Carcinogenic Potency Database. *Environ. Health Perspect.* 79: 259-272 (1989).
- McCann, J., Gold, L. S., Horn, L., McGill, R., Graedel, T. E., and Kaldor, J. Statistical analysis of Salmonella test data and comparison to results of animal cancer tests. *Mutat. Res.* 205: 183-195 (1988).
- Gold, L. S., Wright, C., Bernstein, L., and de Veciana, M. Reproducibility of results in 'near-replicate' carcinogenesis bioassays. *J. Natl. Cancer Inst.* 78: 1149-1158 (1987).
- Gold, L. S., Ward, J., Bernstein, L., and Stern, B. Association between carcinogenic potency and tumor pathology in rodent carcinogenesis bioassays. *Fund. Appl. Toxicol.* 6: 677-690 (1986).
- Ames, B. N., Magaw, R., and Gold, L. S. Ranking possible carcinogenic hazards. *Science* 236: 271-280 (1987).
- Ames, B. N., Magaw, R., and Gold, L. S. Reply to letter to the editor: Risk assessment. *Science* 237: 235 (1987).
- Ames, B. N., Magaw, R., and Gold, L. S. Reply to letter to the editor: Carcinogenicity of aflatoxins. *Science* 237: 1283-1284 (1987).
- Ames, B. N., Gold, L. S., and Magaw, R. Reply to letter to the editor: Risk assessment. *Science* 237: 1399-1400 (1987).
- Ames, B. N., and Gold, L. S. Reply to letter to the editor: Paleolithic diet, evolution, and carcinogens. *Science* 238: 1634 (1987).
- Ames, B. N., and Gold, L. S. Reply to technical comment: Carcinogenic risk estimation. *Science* 240: 1045-1047 (1988).
- Gold, L. S., Backman, G. M., Hooper, K., and Peto, R. Ranking the potential carcinogenic hazards to workers from exposures to chemicals that are tumorigenic in rodents. *Environ. Health Perspect.* 76: 211-219 (1987).
- Gold, L. S., Bernstein, L., Magaw, R., and Slone, T. H. Interspecies extrapolation in carcinogenesis: prediction between rats and mice. *Environ. Health Perspect.* 81: 211-219 (1989).

**Supplement to the
Carcinogenic Potency Database**

Plot of the Carcinogenic Potency Database

Spe Strain Site Xpo+Xpt Sex Route Hist Notes		TD50	2Tailpvl
		DR	AuOp
ACETALDEHYDE	<u>100ng.....1ug.....10.....100.....1mg.....10.....100.....1g.....10</u>		
1 H f syg inh lar mix 52w81 er	.	728.mg	P<.04 +
a H f syg inh lar adq 52w81 er	*	1.14gm	P<.1 +
b H f syg inh lar sqc 52w81 er		2.36gm	P<.3 +
2 H m syg inh res mix 52w81 er	.	461.mg	P<.02 +
a H m syg inh lar mix 52w81 er		461.mg	P<.02 +
b H m syg inh lar cic 52w81 er		641.mg	P<.04 +
c H m syg inh nse apc 52w81 er		2.07gm	P<.3 +
d H m syg inh lar sqc 52w81 er		2.07gm	P<.3 +
3 R f wis inh nse adc 26m28 erv	.+ .	370.mg *	P<.0005+
a R f wis inh nse sqc 26m28 erv		1.03gm Z	P<.0005+
b R f wis inh nse cic 26m28 erv		3.00gm *	P<.007 +
4 R m wis inh nse adc 26m28 erv	.+ .	185.mg *	P<.0005+
a R m wis inh nse sqc 26m28 erv		627.mg Z	P<.0005+
ACETAMINOPHEN***	<u>100ng.....1ug.....10.....100.....1mg.....10.....100.....1g.....10</u>		
5 M m b6c eat liv hpc 70w70 e	>	no dre	P=1. -
a M m b6c eat liv hpa 70w70 e		no dre	P=1. -
b M m b6c eat lun ald 70w70 e		no dre	P=1. -
6 R f f3d eat liv tum 24m30 e	>	no dre	P=1.
a R f f3d eat nas tum 24m30 e		no dre	P=1. -
b R f f3d eat tba mix 24m30 e		no dre	P=1. -
7 R m f3d eat liv tum 24m30 e	>	no dre	P=1.
a R m f3d eat nas tum 24m30 e		no dre	P=1. -
b R m f3d eat tba mix 24m30 e		no dre	P=1. -
8 R f lee eat liv nnd 78w78 er	. + .	1.34gm /	P<.0005+
a R f lee eat ubl mix 78w78 er		1.75gm *	P<.08 +
b R f lee eat ubl pam 78w78 er		2.33gm *	P<.2 +
c R f lee eat ubl car 78w78 er		7.11gm *	P<.3 +
d R f lee eat liv hpc 78w78 er		no dre	P=1.
e R f lee eat tba mix 78w78 er		565.mg *	P<.0005+
9 R m lee eat liv nnd 78w78 er	. + .	1.05gm *	P<.002 +
a R m lee eat ubl mix 78w78 er		1.19gm *	P<.007 +
b R m lee eat ubl pam 78w78 er		1.34gm *	P<.02 +
c R m lee eat ubl car 78w78 er		11.2gm *	P<.3 +
d R m lee eat liv hpc 78w78 er		no dre	P=1.
e R m lee eat tba mix 78w78 er		440.mg *	P<.0005+
2-ACETYLAMINOFLUORENE***	<u>100ng.....1ug.....10.....100.....1mg.....10.....100.....1g.....10</u>		
10 R m f3d eat liv hpc 24m24 e	.+ .	.640mg *	P<.0005+
a R m f3d eat liv thc 24m24 e		.697mg *	P<.0005
b R m f3d eat liv ghc 24m24 e		no dre	P=1.
c R m f3d eat liv cic 24m24 e		no dre	P=1.
ACRYLAMIDE	<u>100ng.....1ug.....10.....100.....1mg.....10.....100.....1g.....10</u>		
11 R f f34 wat mgl ben 24m24 e	. + .	4.21mg *	P<.002 +
a R f f34 wat mgl fib 24m24 e		20.9mg *	P<.0005+
b R f f34 wat orc sqc 24m24 e		16.2mg *	P<.02 +
c R f f34 wat mgl adc 24m24 e		17.8mg *	P<.02 +
d R f f34 wat tyf mix 24m24 e		24.4mg *	P<.03
e R f f34 wat pit ade 24m24 e		13.2mg *	P<.5 +
f R f f34 wat mgl fba 24m24 e		16.5mg *	P<.3 +
12 R m f34 wat tyf ade 24m24 e	. + .	13.2mg *	P<.003
a R m f34 wat tes mmn 24m24 e		11.4mg *	P<.03 +
b R m f34 wat spd ast 24m24 e		39.7mg *	P<.05 +
c R m f34 wat adr phe 24m24 e		16.6mg *	P<.2 +
d R m f34 wat spl leu 24m24 e		45.8mg *	P<.8
ALKYLDIMETHYLAMINE OXIDES, COMMERCIAL GRADE.1ug.....10.....100.....1mg.....10.....100.....1g.....10			
13 R f cdr eat pit ade 24m24 er	>	230.mg *	P<.2 -
14 R m cdr eat pit ade 24m24 er	. *	236.mg Z	P<.03 -
3-AMINO-1,4-DIMETHYL-5H-PYRIDO[4,3-b]INDOLE ACETATE***	<u>.....100.....1mg.....10.....100.....1g.....10</u>		
15 R f f3d eat liv hpc 52w52 e	. + .	.577mg	P<.0005+
16 R m f3d eat liv hpc 52w52 e	. + .	.574mg	P<.0005+
2-AMINO-3,4-DIMETHYLMIDAZO[4,5-f]QUINOLINE.1ug.....10.....100.....1mg.....10.....100.....1g.....10			
17 M f cdf eat for mix 91w91 e	. + .	10.7mg *	P<.0005+
a M f cdf eat for sqc 91w91 e		24.5mg *	P<.0005+
b M f cdf eat liv mix 91w91 e		27.1mg *	P<.0005+
c M f cdf eat liv hpc 91w91 e		65.6mg /	P<.0005+
d M f cdf eat lun mix 91w91 e		25.1mg \	P<.03 -
18 M m cdf eat for mix 91w91 e	. + .	14.5mg *	P<.0005+
a M m cdf eat for sqc 91w91 e		22.4mg /	P<.0005+
b M m cdf eat lun mix 91w91 e		148.mg *	P<.2 -
c M m cdf eat liv mix 91w91 e		no dre	P=1.
d M m cdf eat liv hpc 91w91 e		no dre	P=1.

RefNum	LoConf	UpConf	Cntrl	1Dose	1Inc	2Dose	2Inc		Citation or Pathology	Brkly Code
ACETALDEHYDE 75-07-0										
1	1766	219. ^{mg} n.s.s.	0/14	391. ^{mg}	3/15				Feron;ejca,18,13-31;1982/pers.comm.	
a	1766	279. ^{mg} n.s.s.	0/14	391. ^{mg}	2/15					
b	1766	383. ^{mg} n.s.s.	0/14	391. ^{mg}	1/15					
2	1766	158. ^{mg} n.s.s.	0/15	344. ^{mg}	4/15					
a	1766	158. ^{mg} n.s.s.	0/15	344. ^{mg}	4/15					
b	1766	193. ^{mg} n.s.s.	0/15	344. ^{mg}	3/15					
c	1766	337. ^{mg} n.s.s.	0/15	344. ^{mg}	1/15					
d	1766	337. ^{mg} n.s.s.	0/15	344. ^{mg}	1/15					
3	1757	263. ^{mg} 540. ^{mg}	0/50	101. ^{mg}	6/48	202. ^{mg}	26/53	209. ^{mg}	21/53	Woutersen;txcy,41,213-231;1986
a	1757	624. ^{mg} 1.92gm	0/50	101. ^{mg}	0/50	202. ^{mg}	5/53	209. ^{mg}	17/53	
b	1757	1.36gm 33.3gm	0/50	101. ^{mg}	0/48	202. ^{mg}	3/53	209. ^{mg}	5/53	
4	1757	137. ^{mg} 259. ^{mg}	0/49	70.8mg	16/52	142. ^{mg}	31/53	147. ^{mg}	21/49	
a	1757	380. ^{mg} 1.38gm	1/49	70.8mg	1/52	142. ^{mg}	10/53	147. ^{mg}	15/49	
ACETAMINOPHEN*** (Tylenol, paracetamol) 103-90-2										
5	1779	867. ^{mg} n.s.s.	0/30	600. ^{mg}	0/32	1.20gm	0/15		Hagiwara;faat,7,376-386;1986	
a	1779	1.64gm n.s.s.	3/30	600. ^{mg}	2/32	1.20gm	1/15			
b	1779	2.58gm n.s.s.	2/30	600. ^{mg}	1/32	1.20gm	0/15			
6	1712	2.79gm n.s.s.	0/50	260. ^{mg}	0/50	520. ^{mg}	0/50		Hiraga;gann,76,79-85;1985	
a	1712	2.79gm n.s.s.	0/50	260. ^{mg}	0/50	520. ^{mg}	0/50			
b	1712	885. ^{mg} n.s.s.	40/50	260. ^{mg}	42/50	520. ^{mg}	35/50			
7	1712	1.55gm n.s.s.	0/50	144. ^{mg}	0/50	288. ^{mg}	0/50			
a	1712	1.55gm n.s.s.	0/50	144. ^{mg}	0/50	288. ^{mg}	0/50			
b	1712	90.8mg n.s.s.	50/50	144. ^{mg}	49/50	288. ^{mg}	49/50			
8	1753	651. ^{mg} 3.83gm	0/40	250. ^{mg}	0/49	500. ^{mg}	10/50		Flaks;apms,93,367-377;1985/pers.comm.	
a	1753	782. ^{mg} n.s.s.	0/40	250. ^{mg}	5/49	500. ^{mg}	3/50			
b	1753	950. ^{mg} n.s.s.	0/40	250. ^{mg}	4/49	500. ^{mg}	2/50			
c	1753	1.75gm n.s.s.	0/40	250. ^{mg}	1/49	500. ^{mg}	1/50			
d	1753	953. ^{mg} n.s.s.	0/40	250. ^{mg}	0/49	500. ^{mg}	0/50			
e	1753	341. ^{mg} 1.08gm	0/40	250. ^{mg}	6/49	500. ^{mg}	16/50			
9	1753	512. ^{mg} 3.35gm	0/40	200. ^{mg}	1/48	400. ^{mg}	9/49			
a	1753	558. ^{mg} 14.3gm	0/40	200. ^{mg}	3/48	400. ^{mg}	6/49			
b	1753	608. ^{mg} n.s.s.	0/40	200. ^{mg}	3/48	400. ^{mg}	5/49			
c	1753	1.82gm n.s.s.	0/40	200. ^{mg}	0/48	400. ^{mg}	1/49			
d	1753	747. ^{mg} n.s.s.	0/40	200. ^{mg}	0/48	400. ^{mg}	0/49			
e	1753	265. ^{mg} 820. ^{mg}	0/40	200. ^{mg}	5/48	400. ^{mg}	17/49			
2-ACETYLAMINOFLUORENE*** (N-2-fluorenylacetamide) 53-96-3										
10	1756	.385mg 1.11mg	0/30	.320mg	3/29	1.60mg	26/28	8.00mg	23/23	Ogiso;txpy,13,257-265;1985
a	1756	.421mg 1.21mg	0/30	.320mg	3/29	1.60mg	25/28	8.00mg	23/23	
b	1756	28.2mg n.s.s.	0/30	.320mg	0/29	1.60mg	1/28	8.00mg	0/23	
c	1756	1.52mg n.s.s.	0/30	.320mg	0/29	1.60mg	0/28	8.00mg	0/23	
ACRYLAMIDE (2-propenamide) 79-06-1										
11	1787	2.08mg 22.0mg	10/60	10.0ug	11/60	100.ug	9/60	.500mg	19/58	2.00mg 23/61
a	1787	7.94mg 87.1mg	0/60	10.0ug	0/60	100.ug	0/60	.500mg	0/58	2.00mg 5/61
b	1787	6.10mg n.s.s.	0/60	10.0ug	3/60	100.ug	2/60	.500mg	1/60	2.00mg 7/61
c	1787	6.46mg n.s.s.	2/60	10.0ug	1/60	100.ug	1/60	.500mg	2/60	2.00mg 6/61
d	1787	7.94mg n.s.s.	1/58	10.0ug	0/59	100.ug	1/59	.500mg	1/58	2.00mg 4/60
e	1787	2.50mg n.s.s.	25/59	10.0ug	30/60	100.ug	32/60	.500mg	27/60	2.00mg 32/60
f	1787	4.19mg n.s.s.	9/60	10.0ug	10/60	100.ug	8/60	.500mg	14/58	2.00mg 13/61
12	1787	5.50mg 89.4mg	1/60	10.0ug	0/58	100.ug	2/59	.500mg	1/59	2.00mg 7/59
a	1787	4.29mg n.s.s.	2/60	10.0ug	0/60	100.ug	5/60	.500mg	8/60	2.00mg 7/60
b	1787	11.0mg n.s.s.	1/60	10.0ug	0/60	100.ug	0/60	.500mg	0/60	2.00mg 3/60
c	1787	5.04mg n.s.s.	3/60	10.0ug	7/59	100.ug	7/60	.500mg	5/60	2.00mg 10/60
d	1787	4.68mg n.s.s.	10/60	10.0ug	20/60	100.ug	14/60	.500mg	14/60	2.00mg 16/60
ALKYLDIMETHYLAMINE-OXIDES, COMMERCIAL GRADE mixture										
13	1697	73.8mg n.s.s.	32/49	5.00mg	26/50	50.0mg	28/50	100.ug	36/50	Cardin;faat,5,869-878;1985
14	1697	103.0mg n.s.s.	16/50	4.00mg	4/50	40.0mg	11/50	80.0mg	20/49	
3-AMINO-1,4-DIMETHYL-5H-PYRIDO[4,3-b]INDOLE ACETATE*** (trp-P-1 acetate) 75104-43-7										
15	1683	.310mg 1.04mg	0/50	10.0mg	37/39					Takayama;gann,76,815-817;1985
16	1683	.342mg 1.01mg	0/50	6.00mg	30/36					
2-AMINO-3,4-DIMETHYLMIDAZO[4,5-f]QUINOLINE (MeIQ) 77094-11-2										
17	1798	7.18mg 16.5mg	0/40	13.0mg	19/36	52.0mg	34/38			Ohgaki;canc,7,1889-1893;1986
a	1798	16.0mg 39.7mg	0/40	13.0mg	11/36	52.0mg	24/38			
b	1798	17.2mg 45.4mg	0/40	13.0mg	4/36	52.0mg	27/38			
c	1798	36.4mg 135.0mg	0/40	13.0mg	0/36	52.0mg	16/38			
d	1798	10.1mg n.s.s.	5/40	13.0mg	12/36	(52.0mg	7/38)			
18	1798	9.53mg 23.1mg	0/29	12.0mg	7/38	48.0mg	35/38			
a	1798	14.4mg 37.1mg	0/29	12.0mg	3/38	48.0mg	30/38			
b	1798	46.8mg n.s.s.	6/29	12.0mg	6/38	48.0mg	12/38			
c	1798	70.6mg n.s.s.	4/29	12.0mg	11/38	48.0mg	7/38			
d	1798	163.0mg n.s.s.	1/29	12.0mg	3/38	48.0mg	1/38			

Spe	Strain	Site	Xpo+Xpt		TD50	ZTailpvl
Sex	Route	Hist	Notes		DR	AuOp
2-AMINO-3-METHYLMIDAZO[4,5-f]QUINOLINE***						
19	R f	f3d eat zym sqc	24m24	. + .	9.14mg	P<.0005+
a	R f	f3d eat cli sqc	24m24		14.8mg	P<.0005+
b	R f	f3d eat liv hpc	24m24		17.2mg	P<.0005+
c	R f	f3d eat lgi adc	24m24		40.3mg	P<.0005+
d	R f	f3d eat ski sqc	24m24		132.0mg	P<.03 +
e	R f	f3d eat smi adc	24m24		406.0mg	P<.3 +
f	R f	f3d eat orc sqc	24m24		406.0mg	P<.3 +
20	R m	f3d eat zym sqc	24m24	. + .	3.57mg	P<.0005+
a	R m	f3d eat liv hpc	24m24		7.45mg	P<.0005+
b	R m	f3d eat lgi adc	24m24		8.38mg	P<.0005+
c	R m	f3d eat ski sqc	24m24		14.9mg	P<.0005+
d	R m	f3d eat smi adc	24m24		23.1mg	P<.0005+
e	R m	f3d eat orc sqc	24m24		160.0mg	P<.07 +
2-AMINO-3-METHYLMIDAZO[4,5-f]QUINOLINE.HCl.						
21	R f	sda gav mgl car	31w52 ev	. + .	3.29mg	P<.0005+
a	R f	sda gav mam mix	31w52 ev		3.80mg	P<.002 +
b	R f	sda gav zym epc	31w52 ev		4.50mg	P<.0005+
c	R f	sda gav liv mix	31w52 ev		9.12mg	P<.006 +
d	R f	sda gav liv rnd	31w52 ev		19.2mg	P<.06 +
e	R f	sda gav liv hpc	31w52 ev		29.3mg	P<.2 +
f	R f	sda gav liv hae	31w52 ev		29.5mg	P<.2 +
g	R f	sda gav pan ana	31w52 ev		59.7mg	P<.3 +
h	R f	sda gav mix tpp	31w52 ev		59.7mg	P<.3 +
i	R f	sda gav tba mix	31w52 ev		1.59mg	P<.0005
4-AMINODIPHENYL.HCl						
22	M f	bcn wat liv hpc	96w96 ekr	. + .	36.8mg	* P<.0005+
a	M f	bcn wat mix ang	96w96 ekr		323.0mg	* P<.2 +
b	M f	bcn wat ubl car	96w96 ekr		325.0mg	* P<.4 +
23	M m	bcn wat ubl car	96w96 ekr	. + .	32.6mg	* P<.0005+
a	M m	bcn wat liv hpc	96w96 ekr		234.0mg	* P<.2 +
24	R f	sda gav mgl car	31w52 ev	. + .	.980mg	P<.0005+
a	R f	sda gav mam mix	31w52 ev		.984mg	P<.0005+
b	R f	sda gav liv tum	31w52 ev		no dre	P=1. -
c	R f	sda gav tba mix	31w52 ev		.897mg	P<.0005
AMOBARBITAL						
25	R m	f34 wat liv hct	72w72 e	.100ng...1ug...10...100...1mg...10...100...1g...10	>	no dre P=1.
AMPICILLIN TRIHYDRATE						
26	M f	b6c gav TBA MXB	24m24	.100ng...1ug...10...100...1mg...10...100...1g...10	>	24.9gm * P<.9 -
a	M f	b6c gav liv MXB	24m24			no dre P=1.
b	M f	b6c gav lun MXB	24m24			17.7gm * P<.3
27	M m	b6c gav TBA MXB	24m24	.100ng...1ug...10...100...1mg...10...100...1g...10	>	10.2gm * P<.7 -
a	M m	b6c gav liv MXB	24m24			67.4gm * P<.9
b	M m	b6c gav lun MXB	24m24			no dre P=1.
28	R f	f34 gav pta can	24m24	.100ng...1ug...10...100...1mg...10...100...1g...10	:	#5.90gm * P<.05 -
a	R f	f34 gav TBA MXB	24m24			11.0gm * P<.9
b	R f	f34 gav liv MXB	24m24			no dre P=1.
29	R m	f34 gav amd MXA	24m24	.100ng...1ug...10...100...1mg...10...100...1g...10	:	1.31gm * P<.04 e
a	R m	f34 gav mul MXA	24m24			1.77gm * P<.02
b	R m	f34 gav mul mnl	24m24			1.91gm * P<.03 e
c	R m	f34 gav mul MXA	24m24			1.95gm * P<.04
d	R m	f34 gav TBA MXB	24m24			1.95gm * P<.5
e	R m	f34 gav liv MXB	24m24			34.5gm * P<.3
AMYLOPECTIN SULFATE						
30	R m	f34 eat clr adc	26w52 r	.100ng...1ug...10...100...1mg...10...100...1g...10	.	287.0mg P<.0005+
31	R m	f34 eat clr s/2	39w52 r	.	.	280.0mg P<.0005+
ASPIRIN***						
32	R m	f34 eat ubl pam	68w68 e	.100ng...1ug...10...100...1mg...10...100...1g...10	>	1.67gm P<.3
a	R m	f34 eat liv tum	68w68 e			no dre P=1.
BARBITURIC ACID						
33	R m	f34 wat liv hct	72w72 e	.100ng...1ug...10...100...1mg...10...100...1g...10	>	no dre P=1.
BENZENE***						
34	R f	sda inh mgl mal	24m35 egv	.100ng...1ug...10...100...1mg...10...100...1g...10	.	907.0mg P<.1
a	R f	sda inh orc car	24m35 egv			2.02gm P<.09
b	R f	sda inh zym car	24m35 egv			1.89gm P<.3

RefNum	LoConf	UpConf	Cntrl	1Dose	1Inc	2Dose	2Inc			Citation or Pathology		Brkly Code
2-AMINO-3-METHYLMIDAZO[4,5-f]QUINOLINE*** (IQ) 76180-96-6												
19	1767	5.60mg	16.1mg	0/50	15.0mg	27/40						Ohgaki;enhp,67,129-134;1986
a	1767	8.64mg	28.3mg	0/50	15.0mg	20/40						
b	1767	9.79mg	34.1mg	0/50	15.0mg	18/40						
c	1767	18.9mg	112.mg	0/50	15.0mg	9/40						
d	1767	39.9mg	n.s.s.	0/50	15.0mg	3/40						
e	1767	66.1mg	n.s.s.	0/50	15.0mg	1/40						
f	1767	66.1mg	n.s.s.	0/50	15.0mg	1/40						
20	1767	2.11mg	6.16mg	0/50	12.0mg	36/40						
a	1767	4.53mg	13.4mg	1/50	12.0mg	27/40						
b	1767	5.08mg	15.0mg	0/50	12.0mg	25/40						
c	1767	8.35mg	30.1mg	0/50	12.0mg	17/40						
d	1767	11.8mg	54.1mg	0/50	12.0mg	12/40						
e	1767	39.4mg	n.s.s.	0/50	12.0mg	2/40						
2-AMINO-3-METHYLMIDAZO[4,5-f]QUINOLINE.HCl (IQ, hydrochloride salt) ---												
21	1721	1.75mg	7.23mg	0/27	11.1mg	14/32						Tanaka;gann,76,570-576;1985/pers.comm.
a	1721	1.86mg	16.6mg	2/27	11.1mg	14/32						
b	1721	2.24mg	11.5mg	0/27	11.1mg	11/32						
c	1721	3.71mg	81.0mg	0/27	11.1mg	6/32						
d	1721	5.82mg	n.s.s.	0/27	11.1mg	3/32						
e	1721	7.22mg	n.s.s.	0/27	11.1mg	2/32						
f	1721	7.22mg	n.s.s.	0/27	11.1mg	2/32						
g	1721	9.71mg	n.s.s.	0/27	11.1mg	1/32						
h	1721	9.71mg	n.s.s.	0/27	11.1mg	1/32						
i	1721	.900mg	3.30mg	2/27	11.1mg	23/32						
4-AMINODIPHENYL.HCl 2113-61-3												
22	1711m	16.6mg	113.mg	0/34	1.40mg	0/20	3.80mg	1/29	7.60mg	2/24	15.0mg	4/12 30.0mg 1/2 Schieferstein; ejca,21,865-873;1985
a	1711m	52.6mg	n.s.s.	0/34	1.40mg	0/20	3.80mg	0/29	7.60mg	0/24	15.0mg	1/12 30.0mg 0/2
b	1711m	52.9mg	n.s.s.	0/34	1.40mg	0/20	3.80mg	0/29	7.60mg	1/24	15.0mg	0/12 30.0mg 0/2
23	1711n	18.2mg	68.6mg	0/21	1.17mg	0/23	2.33mg	1/32	4.67mg	0/29	9.17mg	5/25 18.3mg 10/22
a	1711n	61.0mg	n.s.s.	1/21	1.17mg	0/23	2.33mg	0/32	4.67mg	0/29	9.17mg	0/25 18.3mg 3/22
24	1721	.553mg	1.95mg	0/27	4.73mg	18/32						Tanaka;gann,76,570-576;1985/pers.comm.
a	1721	.553mg	2.41mg	2/27	4.73mg	19/32						
b	1721	7.80mg	n.s.s.	0/27	4.73mg	0/32						
c	1721	.494mg	2.08mg	2/27	4.73mg	20/32						
AMOBARBITAL 57-43-2												
25	1690	29.6mg	n.s.s.	0/13	25.0mg	0/12						Diwan;jnci,74,509-516;1985
AMPICILLIN TRIHYDRATE 7177-48-2												
26	c56086	1.65gm	n.s.s.	32/50	1.06gm	21/50	2.12gm	28/50				
a	c56086	n.s.s.	n.s.s.	0/50	1.06gm	0/50	2.12gm	0/50				liv:hpa,hpc,nnd.
b	c56086	4.60gm	n.s.s.	2/50	1.06gm	3/50	2.12gm	4/50				lun:a/a,a/c.
27	c56086	1.48gm	n.s.s.	23/50	1.06gm	21/50	2.12gm	18/50				
a	c56086	3.47gm	n.s.s.	9/50	1.06gm	4/50	2.12gm	7/50				liv:hpa,hpc,nnd.
b	c56086	3.93gm	n.s.s.	6/50	1.06gm	6/50	2.12gm	3/50				lun:a/a,a/c.
28	c56086	2.39gm	n.s.s.	0/50	531.mg	3/50	1.06gm	3/50				S
a	c56086	660.mg	n.s.s.	44/50	531.mg	41/50	1.06gm	45/50				
b	c56086	n.s.s.	n.s.s.	0/50	531.mg	2/50	1.06gm	0/50				liv:hpa,hpc,nnd.
29	c56086	560.mg	n.s.s.	13/50	531.mg	16/50	1.06gm	23/50				amid:phe,phm.
a	c56086	830.mg	n.s.s.	5/50	531.mg	14/50	1.06gm	14/50				mul:lle,mth,mml,mnl.
b	c56086	859.mg	n.s.s.	5/50	531.mg	14/50	1.06gm	13/50				S
c	c56086	851.mg	n.s.s.	6/50	531.mg	16/50	1.06gm	14/50				
d	c56086	468.mg	n.s.s.	39/50	531.mg	42/50	1.06gm	42/50				
e	c56086	5.63gm	n.s.s.	0/50	531.mg	0/50	1.06gm	1/50				liv:hpa,hpc,nnd.
AMYLOPECTIN SULFATE 9047-13-6												
30	1716m	133.mg	830.mg	0/18	1.00gm	9/20						Ishioka;clet,26,277-282;1985
31	1716n	140.mg	669.mg	0/18	1.50gm	12/20						
ASPIRIN*** 50-78-2												
32	1786	272.mg	n.s.s.	0/36	200.mg	1/29						Sakata;cnr,46,3903-3906;1986
a	1786	511.mg	n.s.s.	0/36	200.mg	0/29						
BARBITURIC ACID 67-52-7												
33	1690	32.1mg	n.s.s.	0/13	25.0mg	0/13						Diwan;jnci,74,509-516;1985
BENZENE*** 71-43-2												
34	bt4004	291.mg	n.s.s.	2/60	53.4mg	6/54						Maltoni;ajim,7,415-446;1985
a	bt4004	496.mg	n.s.s.	0/60	53.4mg	2/54						
b	bt4004	433.mg	n.s.s.	1/60	53.4mg	3/54						

Spe	Strain	Site	Xpo+Xpt		TD50	2Tailpvl
Sex	Route	Hist	Notes		DR	AuOp
c	R f	sda	inh liv hpt	24m35 egv	4.07gm	P<.3
d	R f	sda	inh nas car	24m35 egv	4.07gm	P<.3
e	R f	sda	inh tba car	24m35 egv	947.mg	P<.07
f	R f	sda	inh tba mal	24m35 egv	553.mg	P<.2 +
35	R f	sda	gav zym car	12m33 ej	.+ .	222.mg * P<.0005+
a	R f	sda	gav orc car	12m33 ej	945.mg * P<.04 +	
b	R f	sda	gav mgl mal	12m33 ej	517.mg * P<.3	
c	R f	sda	gav liv hpt	12m33 ej	no dre P=1.	
d	R f	sda	gav ski car	12m33 ej	no dre P=1.	
e	R f	sda	gav ... leu	12m33 ej	no dre P=1.	
f	R f	sda	gav tba mal	12m33 ej	75.3mg * P<.0005	
36	R f	sda	gav orc car	24m33 e	415.mg P<.0005+	
a	R f	sda	gav zym car	24m33 e	585.mg P<.0005+	
b	R f	sda	gav for cic	24m33 e	787.mg P<.002 +	
c	R f	sda	gav liv hpt	24m33 e	4.03gm P<.3	
d	R f	sda	gav liv ang	24m33 e	7.91gm P<.2 +	
e	R f	sda	gav nas car	24m33 e	8.51gm P<.2 +	
f	R f	sda	gav ski car	24m33 e	no dre P=1.	
g	R f	sda	gav tba mal	24m33 e	161.mg P<.0005	
h	R f	sda	gav tba car	24m33	248.mg P<.0005	
37	R m	sda	gav ... leu	12m33 ej	.+ .	.506.mg * P<.008
a	R m	sda	gav liv hpt	12m33 ej	3.09gm * P<.2	
b	R m	sda	gav sub ang	12m33 ej	3.09gm * P<.2	
c	R m	sda	gav mgl mal	12m33 ej	no dre P=1.	
d	R m	sda	gav ski car	12m33 ej	no dre P=1.	
e	R m	sda	gav orc car	12m33 ej	no dre P=1.	
f	R m	sda	gav zym car	12m33 ej	no dre P=1.	
g	R m	sda	gav tba mal	12m33 ej	232.mg * P<.004	
38	R m	sda	gav orc car	24m33 e	386.mg P<.0005+	
a	R m	sda	gav zym car	24m33 e	501.mg P<.0005+	
b	R m	sda	gav ski car	24m33 e	904.mg P<.0005+	
c	R m	sda	gav nas car	24m33 e	3.53gm P<.05 +	
d	R m	sda	gav liv ang	24m33 e	4.48gm P<.09 +	
e	R m	sda	gav for ivc	24m33 e	6.12gm P<.2 +	
f	R m	sda	gav liv hpt	24m33 e	no dre P=1.	
g	R m	sda	gav tba mal	24m33 e	131.mg P<.0005	
h	R m	sda	gav tba car	24m33	219.mg P<.0005	
BENZYL ACETATE						
					100ng...1ug...10...100...1mg...10...100...1g...10	
39	M f	b6c	gav MXB	MXB 24m24 s	: +	: 1.75gm / P<.003
a	M f	b6c	gav liv	MXA 24m24 s	2.03gm / P<.02	
b	M f	b6c	gav for sqp	24m24 s	2.94gm * P<.04 p	
c	M f	b6c	gav liv hpa	24m24 s	3.21gm * P<.02 p	
d	M f	b6c	gav TBA	MXB 24m24 s	4.27gm * P<.9	
e	M f	b6c	gav liv	MXB 24m24 s	2.03gm / P<.02	
f	M f	b6c	gav lun	MXB 24m24 s	no dre P=1.	
40	M m	b6c	gav MXB	MXB 24m24	: + :	702.mg * P<.0005
a	M m	b6c	gav liv	MXA 24m24	758.mg * P<.004	
b	M m	b6c	gav liv hpa	24m24	955.mg * P<.0005p	
c	M m	b6c	gav for MXA	24m24	1.91gm * P<.03 p	
d	M m	b6c	gav for sqp	24m24	2.14gm * P<.03 p	
e	M m	b6c	gav TBA	MXB 24m24	829.mg * P<.2	
f	M m	b6c	gav liv	MXB 24m24	758.mg * P<.004	
g	M m	b6c	gav lun	MXB 24m24	no dre P=1.	
41	R f	f34	gav TBA	MXB 24m24	: ±	285.mg * P<.06 -
a	R f	f34	gav liv	MXB 24m24	6.48gm * P<.6	
42	R m	f34	gav pan ana	24m24	: + :	282.mg / P<.003 *
a	R m	f34	gav pre MXA	24m24	2.17gm * P<.04	
b	R m	f34	gav pre MXA	24m24	2.47gm * P<.02	
c	R m	f34	gav pre ccn	24m24	4.27gm * P<.04	
d	R m	f34	gav TBA	MXB 24m24	376.mg / P<.2	
e	R m	f34	gav liv	MXB 24m24	6.47gm * P<.5	
BENZYL CHLORIDE						
					100ng...1ug...10...100...1mg...10...100...1g...10	
43	M f	b6c	gav for mix	24m25 e	.+ .	81.0mg * P<.0005+
a	M f	b6c	gav lun mix	24m25 e	337.mg * P<.04	
b	M f	b6c	gav for car	24m25 e	445.mg * P<.04 +	
c	M f	b6c	gav liv mix	24m25 e	no dre P=1.	
44	M m	b6c	gav for mix	24m25 e	:+ .	49.6mg / P<.0005+
a	M m	b6c	gav for car	24m25 e	221.mg * P<.002 +	
b	M m	b6c	gav ... h/2	24m25 e	454.mg * P<.009	
c	M m	b6c	gav liv mix	24m25 e	225.mg * P<.5	
d	M m	b6c	gav lun mix	24m25 e	no dre P=1.	
45	R f	f34	gav thy mix	24m25 e	.+ .	40.6mg * P<.009
a	R f	f34	gav liv nnd	24m25 e	330.mg * P<.7	
46	R m	f34	gav liv nnd	24m25 e	.>	no dre P=1.

RefNum	LoConf	UpConf	Cntrl	1Dose	1Inc	2Dose	2Inc	Citation or Pathology	Brkly Code
c	bt4004	663.mg n.s.s.	0/60	53.4mg	1/54				
d	bt4004	663.mg n.s.s.	0/60	53.4mg	1/54				
e	bt4004	314.mg n.s.s.	1/60	53.4mg	5/54				
f	bt4004	181.mg n.s.s.	9/60	53.4mg	14/54				
35	bt901	108.mg 716.mg	0/30	11.6mg	2/28	58.0mg	8/28	Maltoni;ajim,7,415-446;1985/1979	
a	bt901	232.mg n.s.s.	0/29	11.6mg	0/24	58.0mg	2/21		
b	bt901	141.mg n.s.s.	4/30	11.6mg	4/28	58.0mg	7/28		
c	bt901	74.1mg n.s.s.	0/13	11.6mg	0/30	58.0mg	0/7		
d	bt901	117.mg n.s.s.	0/30	11.6mg	0/30	58.0mg	0/35		
e	bt901	382.mg n.s.s.	1/30	11.6mg	2/30	58.0mg	1/29		
f	bt901	39.4mg 237.mg	7/30	11.6mg	10/28	58.0mg	21/29		
36	bt902	242.mg 794.mg	0/49	237.mg	20/39			Maltoni;ajim,7,415-446;1985	
a	bt902	324.mg 1.21gm	0/49	237.mg	16/40				
b	bt902	318.mg 3.25gm	0/24	237.mg	6/19				
c	bt902	655.mg n.s.s.	0/15	237.mg	1/14				
d	bt902	1.29gm n.s.s.	0/35	237.mg	1/27				
e	bt902	1.39gm n.s.s.	0/40	237.mg	1/29				
f	bt902	2.42gm n.s.s.	1/35	237.mg	0/27				
g	bt902	92.3mg 312.mg	10/49	237.mg	35/40				
h	bt902	152.mg 432.mg	0/50	237.mg	28/40				
37	bt901	175.mg 8.25gm	0/22	11.6mg	0/23	58.0mg	4/24	Maltoni;ajim,7,415-446;1985/1979	
a	bt901	503.mg n.s.s.	0/30	11.6mg	0/30	58.0mg	1/35		
b	bt901	503.mg n.s.s.	0/30	11.6mg	0/30	58.0mg	1/35		
c	bt901	84.1mg n.s.s.	0/22	11.6mg	0/22	58.0mg	0/22		
d	bt901	117.mg n.s.s.	0/30	11.6mg	0/30	58.0mg	0/35		
e	bt901	74.2mg n.s.s.	0/19	11.6mg	0/20	58.0mg	0/17		
f	bt901	84.1mg n.s.s.	0/22	11.6mg	0/22	58.0mg	0/22		
g	bt901	101.mg 1.63gm	1/22	11.6mg	1/23	58.0mg	8/24		
38	bt902	227.mg 727.mg	0/45	237.mg	21/39			Maltoni;ajim,7,415-446;1985	
a	bt902	280.mg 1.07gm	1/45	237.mg	18/39				
b	bt902	424.mg 2.57gm	0/34	237.mg	9/32				
c	bt902	1.07gm n.s.s.	0/35	237.mg	3/37				
d	bt902	1.10gm n.s.s.	0/32	237.mg	2/31				
e	bt902	996.mg n.s.s.	0/44	237.mg	1/21				
f	bt902	523.mg n.s.s.	3/15	237.mg	3/15				
g	bt902	70.6mg 260.mg	11/45	237.mg	36/39				
h	bt902	134.mg 382.mg	1/50	237.mg	30/40				
BENZYL ACETATE 140-11-4									
39	c06508	795.mg 7.34gm	0/50	350.mg	0/50	704.mg	9/50	for:sqp; liv:hpa. P liv:hpa,hpc. S	
a	c06508	874.mg n.s.s.	1/50	350.mg	0/50	704.mg	10/50		
b	c06508	1.02gm n.s.s.	0/50	350.mg	0/50	704.mg	4/50		
c	c06508	1.27gm n.s.s.	0/50	350.mg	0/50	704.mg	6/50		
d	c06508	383.mg n.s.s.	14/50	350.mg	26/50	704.mg	25/50		
e	c06508	874.mg n.s.s.	1/50	350.mg	0/50	704.mg	10/50		
f	c06508	2.30gm n.s.s.	1/50	350.mg	3/50	704.mg	1/50		
40	c06508	399.mg 1.87gm	4/50	350.mg	9/50	704.mg	21/50		
a	c06508	387.mg 5.38gm	10/50	350.mg	18/50	704.mg	23/50	for:sqc,sqp; liv:hpa. P liv:hpa,hpc. S	
b	c06508	540.mg 1.96gm	0/50	350.mg	5/50	704.mg	13/50		
c	c06508	808.mg n.s.s.	4/50	350.mg	4/50	704.mg	11/50		
d	c06508	877.mg n.s.s.	3/50	350.mg	3/50	704.mg	9/50		
e	c06508	309.mg n.s.s.	32/50	350.mg	35/50	704.mg	37/50		
f	c06508	387.mg 5.38gm	10/50	350.mg	18/50	704.mg	23/50		
g	c06508	1.44gm n.s.s.	12/50	350.mg	7/50	704.mg	7/50		
41	c06508	116.mg n.s.s.	43/50	175.mg	44/50	352.mg	44/50		
a	c06508	950.mg n.s.s.	1/50	175.mg	2/50	352.mg	1/50		
42	c06508	146.mg 1.86gm	22/50	174.mg	27/50	352.mg	37/50		
a	c06508	814.mg n.s.s.	1/50	174.mg	1/50	352.mg	6/50	pre:acn,can,ccn. S pre:acn,ccn. S	
b	c06508	916.mg n.s.s.	0/50	174.mg	1/50	352.mg	4/50		
c	c06508	1.26gm n.s.s.	0/50	174.mg	0/50	352.mg	3/50		
d	c06508	134.mg n.s.s.	44/50	174.mg	46/50	352.mg	45/50		
e	c06508	1.24gm n.s.s.	1/50	174.mg	2/50	352.mg	2/50		
BENZYL CHLORIDE (alpha-chloro toluene) 100-44-7									
43	1827	49.8mg 144.mg	0/52	20.7mg	5/50	41.5mg	19/51	Lijinsky;jnci,76,1231-1236;1986	
a	1827	132.mg n.s.s.	1/52	20.7mg	2/51	41.5mg	6/51		
b	1827	169.mg n.s.s.	0/52	20.7mg	2/50	41.5mg	3/51		
c	1827	272.mg n.s.s.	7/52	20.7mg	5/51	41.5mg	3/51		
44	1827	33.0mg 79.2mg	0/51	20.7mg	4/52	41.5mg	32/52		
a	1827	108.mg 736.mg	0/51	20.7mg	2/52	41.5mg	8/52		
b	1827	172.mg 10.5gm	0/52	20.7mg	0/52	41.5mg	5/52		
c	1827	49.7mg n.s.s.	17/52	20.7mg	28/52	41.5mg	20/51		
d	1827	99.1mg n.s.s.	11/52	20.7mg	15/52	41.5mg	11/52		
45	1827	19.8mg 1.52gm	4/52	6.22mg	8/51	12.4mg	14/52		
a	1827	49.2mg n.s.s.	2/52	6.22mg	5/52	12.4mg	3/52		
46	1827	71.9mg n.s.s.	3/52	6.22mg	4/52	12.4mg	2/51		

Spe	Strain	Site	Xpo+Xpt		TD50	2Tailpvl
Sex	Route	Hist	Notes		DR	AuOp
FD & C	BLUE NO. 2***			100ng....1ug.....10.....100.....1mg.....10.....100.....1g.....10		
47	M f	cdr eat tba mal	23m23 e		.33.9gm *	P<.3
a	M f	cdr eat tba mix	23m23 e		no dre	P=1.
48	M m	cdr eat tba mix	95w95 e		>23.4gm *	P<.2
a	M m	cdr eat tba mal	95w95 e		57.1gm *	P<.5
BROMATE, POTASSIUM***				100ng....1ug.....10.....100.....1mg.....10.....100.....1g.....10		
49	M f	b6c wat liv ade	18m24 e		. ±	1.18gm * P<.05
a	M f	b6c wat lun mix	18m24 e		1.05gm *	P<.2
b	M f	b6c wat liv mix	18m24 e		1.71gm *	P<.4
c	M f	b6c wat lun ade	18m24 e		2.03gm *	P<.3
d	M f	b6c wat tba mix	18m24 e		477.mg *	P<.2
BROMOACETALDEHYDE				100ng....1ug.....10.....100.....1mg.....10.....100.....1g.....10		
50	M f	b6c wat liv hem	80w80 e		>	1.02gm P<.2
a	M f	b6c wat for sqp	80w80 e		2.52gm P<.8	
b	M f	b6c wat lun tum	80w80 e		no dre P=1.	
c	M f	b6c wat tba mix	80w80 e		no dre P=1.	
51	M m	b6c wat for sqp	78w78 e		>	1.89gm P<.8
a	M m	b6c wat liv tum	78w78 e		no dre P=1.	
b	M m	b6c wat lun ptm	78w78 e		no dre P=1.	
c	M m	b6c wat tba mix	78w78 e		no dre P=1.	
BROMODICHLOROMETHANE				100ng....1ug.....10.....100.....1mg.....10.....100.....1g.....10		
52	R f	wis wat liv nnd	43m43 ev		. + .	544.mg P<.002 +
53	R m	wis wat pit tum	42m42 ev		. ±	911.mg P<.06
a	R m	wis wat liv nnd	42m42 ev		no dre P=1.	
BROMOETHANOL				100ng....1ug.....10.....100.....1mg.....10.....100.....1g.....10		
54	M f	b6c wat for sqp	79w79 e		. + .	69.7mg P<.0005+
a	M f	b6c wat liv hem	79w79 e		800.mg P<.2	
b	M f	b6c wat lun ptm	79w79 e		1.89gm P<.7	
c	M f	b6c wat tba mix	79w79 e		73.2mg P<.008	
55	M m	b6c wat for sqp	78w78 e		. + .	83.9mg P<.0005+
a	M m	b6c wat liv tum	78w78 e		no dre P=1.	
b	M m	b6c wat lun ptm	78w78 e		no dre P=1.	
c	M m	b6c wat tba mix	78w78 e		86.6mg P<.03	
BUTYL p-HYDROXYBENZOATE				100ng....1ug.....10.....100.....1mg.....10.....100.....1g.....10		
56	M f	icr eat lun tum	24m25		. ±	5.10gm * P<.06
a	M f	icr eat liv tum	24m25		no dre P=1.	
b	M f	icr eat tba mix	24m25		2.72gm * P<.08	
57	M m	icr eat liv tum	24m25		>	27.4gm * P<.5
a	M m	icr eat lun tum	24m25		119.gm * P<1.	
b	M m	icr eat tba mix	24m25		5.24gm * P<.4	
N-BUTYL-N-(4-HYDROXYBUTYL)NITROSAMINE***				1ug.....10.....100.....1mg.....10.....100.....1g.....10		
58	R m	f34 wat ubl tcc	78w78 er		. + .	.175mg P<.0005+
a	R m	f34 wat tes ldc	78w78 er		.386mg P<.002 +	
BUTYLATED HYDROXYANISOLE***				100ng....1ug.....10.....100.....1mg.....10.....100.....1g.....10		
59	R m	f3d eat for pam	24m24 e		. + .	598.mg Z P<.0005+
a	R m	f3d eat for sqc	24m24 e		4.55gm Z P<.0005+	
b	R m	f3d eat liv hpc	24m24 e		no dre P=1.	
CALCIUM ACETATE				100ng....1ug.....10.....100.....1mg.....10.....100.....1g.....10		
60	R m	sda eat kid tum	79w79 e		>	no dre P=1.
a	R m	sda eat liv tum	79w79 e		no dre P=1.	
CATECHOL				100ng....1ug.....10.....100.....1mg.....10.....100.....1g.....10		
61	R m	f34 wat pro cic	78w78 er		>	236.mg P<.8
a	R m	f34 wat ubl tum	78w78 er		no dre P=1.	
CHLORAMBUCIL***				100ng....1ug.....10.....100.....1mg.....10.....100.....1g.....10		
62	R f	sda gav mgl mix	18m24		. + .	.657mg \ P<.0005+
a	R f	sda gav auc sqc	18m24		6.41mg * P<.005 +	
b	R f	sda gav ner mix	18m24		3.86mg * P<.02 +	
c	R f	sda gav tba mal	18m24		.588mg * P<.0005	
d	R f	sda gav tba ben	18m24		1.47mg * P<.09	
CHLORENDIC ACID				100ng....1ug.....10.....100.....1mg.....10.....100.....1g.....10		
63	M f	b6c eat lun MXA	24m24		: + :	#343.mg * P<.003 -
a	M f	b6c eat lun s/a	24m24		412.mg * P<.002	
b	M f	b6c eat MXA	24m24		1.17gm * P<.03	

RefNum	LoConf	UpConf	Cntrl	1Dose	1Inc	2Dose	2Inc		Citation or Pathology	Brkly Code
FD & C BLUE NO. 2*** (indigo carmine) 860-22-0										
47	1698	9.55gm	n.s.s.	30/120	650.mg	15/57	1.95gm	15/48	6.50gm	20/60
a	1698	14.1gm	n.s.s.	50/120	650.mg	20/57	1.95gm	20/48	6.50gm	22/60
48	1698	7.54gm	n.s.s.	26/119	600.mg	13/55	1.80gm	19/58	6.00gm	19/60
a	1698	11.0gm	n.s.s.	22/119	600.mg	8/55	1.80gm	16/58	6.00gm	13/60
BROMATE, POTASSIUM*** 7758-01-2										
49	1789	480.mg	n.s.s.	0/46	75.0mg	3/48	150.mg	3/47		Kurokawa;enhp,69,221-235;1986
a	1789	369.mg	n.s.s.	3/46	75.0mg	3/48	150.mg	8/47		
b	1789	449.mg	n.s.s.	3/46	75.0mg	3/48	150.mg	6/47		
c	1789	549.mg	n.s.s.	2/46	75.0mg	1/48	150.mg	5/47		
d	1789	163.mg	n.s.s.	15/46	75.0mg	16/48	150.mg	22/47		
BROMOACETALDEHYDE 17157-48-1										
50	1761	166.mg	n.s.s.	0/50	85.0mg	1/30				Van Durren;tcam,5,393-403;1985
a	1761	180.mg	n.s.s.	1/50	85.0mg	1/30				
b	1761	311.mg	n.s.s.	0/50	85.0mg	0/30				
c	1761	150.mg	n.s.s.	7/50	85.0mg	3/30				
51	1761	121.mg	n.s.s.	1/45	62.0mg	1/29				
a	1761	208.mg	n.s.s.	0/45	62.0mg	0/29				
b	1761	155.mg	n.s.s.	5/45	62.0mg	1/29				
c	1761	134.mg	n.s.s.	8/45	62.0mg	2/29				
BROMODICHLOROMETHANE (dichlorobromomethane) 75-27-4										
52	1681	307.mg	1.51gm	0/18	94.9mg	17/53				Tumasonis;eaes,9,233-240;1985
53	1681	382.mg	n.s.s.	1/22	83.7mg	10/47				
a	1681	920.mg	n.s.s.	5/22	83.7mg	6/47				
Bromoethanol ---										
54	1761	32.8mg	215.mg	1/50	71.0mg	10/29				Van Durren;tcam,5,393-403;1985
a	1761	130.mg	n.s.s.	0/50	71.0mg	1/29				
b	1761	141.mg	n.s.s.	1/50	71.0mg	1/29				
c	1761	30.8mg	1.68gm	7/50	71.0mg	12/29				
55	1761	37.9mg	315.mg	1/45	76.0mg	9/29				
a	1761	255.mg	n.s.s.	0/45	76.0mg	0/29				
b	1761	190.mg	n.s.s.	5/45	76.0mg	1/29				
c	1761	33.5mg	n.s.s.	8/45	76.0mg	12/29				
BUTYL p-HYDROXYBENZOATE 94-26-8										
56	1688	2.00gm	n.s.s.	2/50	188.mg	4/50	375.mg	2/50	751.mg	8/50
a	1688	1.15gm	n.s.s.	0/50	188.mg	0/50	375.mg	0/50	751.mg	0/50
b	1688	1.04gm	n.s.s.	12/50	188.mg	14/50	375.mg	8/50	751.mg	21/50
57	1688	5.29gm	n.s.s.	0/50	173.mg	1/50	346.mg	0/50	693.mg	1/50
a	1688	3.87gm	n.s.s.	3/50	173.mg	2/50	346.mg	2/50	693.mg	3/50
b	1688	1.41gm	n.s.s.	8/50	173.mg	7/50	346.mg	11/50	693.mg	11/50
N-BUTYL-N-(4-HYDROXYBUTYL)NITROSAMINE*** (butyl-butanol-nitrosamine) 3817-11-6										
58	1718	.100mg	.340mg	0/30	.500mg	20/30				LaVoie;gann,76,266-271;1985/pers.comm.
a	1718	.187mg	1.55mg	2/30	.500mg	13/30				
BUTYLATED HYDROXYANISOLE** (BHA, 2(3)-tert-butyl-4-hydroxyanisole) 25013-16-5										
59	1784	431.mg	858.mg	0/50	50.0mg	0/50	100.mg	0/50	200.mg	0/50
a	1784	2.28gm	11.1gm	0/50	50.0mg	0/50	100.mg	0/50	200.mg	0/50
b	1784	6.03gm	n.s.s.	0/50	50.0mg	0/50	100.mg	0/50	200.mg	3/50
CALCIUM ACETATE 62-54-4										
60	1709	4.28gm	n.s.s.	0/30	1.20gm	0/30				Kasprzak;carc,6,279-282;1985
a	1709	4.28gm	n.s.s.	0/30	1.20gm	0/30				
CATECHOL 120-80-9										
61	1718	23.9mg	n.s.s.	5/30	25.0mg	6/30				LaVoie;gann,76,266-271;1985/pers.comm.
a	1718	86.9mg	n.s.s.	0/30	25.0mg	0/30				
CHLORAMBUCIL*** 305-03-3										
62	1770	.286mg	2.96mg	8/120	.323mg	10/30	(.645mg	5/30)		Berger;smon,13,8-13;1986
a	1770	1.94mg	65.5mg	0/120	.323mg	0/30	.645mg	3/30		
b	1770	1.37mg	n.s.s.	2/120	.323mg	3/30	.645mg	3/30		
c	1770	.343mg	1.26mg	13/120	.323mg	15/30	.645mg	15/30		
d	1770	.517mg	n.s.s.	43/120	.323mg	15/30	.645mg	15/30		
CHLORENDIC ACID 115-28-6										
63	c55072	153.mg	1.94gm	1/50	79.1mg	5/50	160.mg	6/50		lun:a/a,a/c. S
a	c55072	177.mg	1.68gm	0/50	79.1mg	4/50	160.mg	4/50		S
b	c55072	367.mg	n.s.s.	0/50	79.1mg	1/50	160.mg	3/50	meys:hes;	spl:hes. S

Spe	Strain	Site	Xpo+Xpt		TD50	2Tailpvl
Sex	Route	Hist	Notes		DR	AuOp
c	M f	b6c eat	TBA MXB 24m24		87.1mg / P<.0005	
d	M f	b6c eat	liv MXB 24m24		348.mg * P<.02	
e	M f	b6c eat	lun MXB 24m24		343.mg * P<.003	
64	M m	b6c eat	liv MXA 24m24	: +	141.mg * P<.004 c	
a	M m	b6c eat	liv hpc 24m24		206.mg * P<.009 c	
b	M m	b6c eat	liv hpa 24m24		387.mg * P<.08 c	
c	M m	b6c eat	thy fca 24m24		1.59gm * P<.04	
d	M m	b6c eat	TBA MXB 24m24		227.mg * P<.2	
e	M m	b6c eat	liv MXB 24m24		141.mg * P<.004	
f	M m	b6c eat	lun MXB 24m24		no dre P=1.	
65	R f	f34 eat	liv MXA 24m24	: + :	98.8mg * P<.0005c	
a	R f	f34 eat	liv nnd 24m24		162.mg * P<.004 c	
b	R f	f34 eat	liv hpc 24m24		271.mg * P<.02 c	
c	R f	f34 eat	TBA MXB 24m24		no dre P=1.	
d	R f	f34 eat	liv MXB 24m24		98.8mg * P<.0005	
66	R m	f34 eat	MXB MXB 24m24	: + :	25.4mg * P<.0005	
a	R m	f34 eat	liv nnd 24m24		25.7mg * P<.0005c	
b	R m	f34 eat	liv MXA 24m24		32.2mg * P<.002	
c	R m	f34 eat	pan ana 24m24		131.mg * P<.005 c	
d	R m	f34 eat	lun MXA 24m24		148.mg * P<.01	
e	R m	f34 eat	lun a/a 24m24		168.mg * P<.01 e	
f	R m	f34 eat	pre MXA 24m24		59.4mg \ P<.02	
g	R m	f34 eat	sub fbs 24m24		380.mg * P<.05	
h	R m	f34 eat	pre can 24m24		189.mg * P<.2 e	
i	R m	f34 eat	TBA MXB 24m24		no dre P=1.	
j	R m	f34 eat	liv MXB 24m24		32.2mg * P<.002	
CHLORINATED TRISODIUM PHOSPHATE			100ng.....1ug.....10.....100.....1mg.....10.....100.....1g.....10			
67	M f	b6c gav	sub arn 24m24 s	:	#1.49gm \ P<.009 -	
a	M f	b6c gav	TBA MXB 24m24 s		958.mg * P<.2	
b	M f	b6c gav	liv MXB 24m24 s		3.71gm * P<.5	
c	M f	b6c gav	lun MXB 24m24 s		no dre P=1.	
68	M m	b6c gav	adr coa 24m24	:	#5.84gm * P<.04 -	
a	M m	b6c gav	mul mil 24m24		8.42gm * P<.04	
b	M m	b6c gav	TBA MXB 24m24		11.6gm * P<.9	
c	M m	b6c gav	liv MXB 24m24		2.95gm * P<.4	
d	M m	b6c gav	lun MXB 24m24		19.9gm * P<.9	
3-CHLORO-2-METHYLPROPENE, TECHNICAL GRADE (CONTAINING 5% DIMETHYLVINYL CHLORIDE)			10.....100.....1g.....10			
69	M f	b6c gav	for MXA 24m24	:	82.3mg / P<.0005c	
a	M f	b6c gav	for sqp 24m24		87.7mg / P<.0005c	
b	M f	b6c gav	TBA MXB 24m24		149.mg / P<.03	
c	M f	b6c gav	liv MXB 24m24		no dre P=1.	
d	M f	b6c gav	lun MXB 24m24		5.18gm * P<.8	
70	M m	b6c gav	for MXA 24m24	:	73.5mg * P<.0005c	
a	M m	b6c gav	for sqp 24m24		96.2mg * P<.0005c	
b	M m	b6c gav	for sqc 24m24		432.mg * P<.005 c	
c	M m	b6c gav	TBA MXB 24m24		402.mg * P<.6	
d	M m	b6c gav	liv MXB 24m24		no dre P=1.	
e	M m	b6c gav	lun MXB 24m24		no dre P=1.	
71	R f	f34 gav	for ppn 24m24	:	320.mg / P<.003 c	
a	R f	f34 gav	sub fib 24m24		524.mg * P<.02	
b	R f	f34 gav	TBA MXB 24m24		323.mg * P<.7	
c	R f	f34 gav	liv MXB 24m24		no dre P=1.	
72	R m	f34 gav	for ppn 24m24	:	68.7mg / P<.0005c	
a	R m	f34 gav	tes ict 24m24		54.0mg * P<.02	
b	R m	f34 gav	TBA MXB 24m24		109.mg * P<.2	
c	R m	f34 gav	liv MXB 24m24		714.mg / P<.2	
CHLOROFORM***			100ng.....1ug.....10.....100.....1mg.....10.....100.....1g.....10			
73	M f	b6c wat	liv hpc 24m24 e	>	20.2gm * P<.5 -	
a	M f	b6c wat	liv hpa 24m24 e		no dre P=1. -	
b	M f	b6c wat	liv mix 24m24 e		no dre P=1. -	
c	M f	b6c wat	tba mix 24m24 e		no dre P=1. -	
74	R m	osm wat	kid mix 24m24 e		519.mg * P<.0005+	
a	R m	osm wat	kid mix 24m24 e		606.mg * P<.0005	
b	R m	osm wat	kid tla 24m24 e		972.mg * P<.002	
c	R m	osm wat	---		2.20gm * P<.04	
d	R m	osm wat	---		1.36gm * P<.3	
e	R m	osm wat	tba mix 24m24 e		1.97gm * P<.9	
75	R f	wis wat	liv nnd 43m43 ev		883.mg P<.005 +	
a	R f	wis wat	liv hpc 43m43 ev		10.0gm P<.4	
b	R f	wis wat	kid tum 43m43 ev		no dre P=1.	
76	R m	wis wat	kid adc 40m40 ev	>	5.30gm P<.3 +	
a	R m	wis wat	kid ade 40m40 ev		5.30gm P<.3 +	
b	R m	wis wat	liv hpc 40m40 ev		5.30gm P<.3	
c	R m	wis wat	liv nnd 40m40 ev		no dre P=1.	

RefNum	LoConf	UpConf	Cntrl	1Dose	1Inc	2Dose	2Inc	Citation or Pathology	Brkly Code
c c55072	46.6mg	350.mg	29/50	79.1mg	32/50	160.mg	32/50		
d c55072	150.mg	52.5gm	3/50	79.1mg	7/50	160.mg	7/50	liv:hpc,nnd.	
e c55072	153.mg	1.94gm	1/50	79.1mg	5/50	160.mg	6/50	lun:a/a,a/c.	
64 c55072	72.2mg	1.17gm	13/50	73.0mg	23/50	149.mg	27/50	liv:hpc,hpc.	
a c55072	101.mg	8.47gm	9/50	73.0mg	17/50	149.mg	20/50		
b c55072	150.mg	n.s.s.	5/50	73.0mg	9/50	149.mg	10/50		
c c55072	474.mg	n.s.s.	0/50	73.0mg	0/50	149.mg	3/50		S
d c55072	74.7mg	n.s.s.	35/50	73.0mg	31/50	149.mg	39/50		
e c55072	72.2mg	1.17gm	15/50	73.0mg	23/50	149.mg	27/50	liv:hpc,hpc,nnd.	
f c55072	379.mg	n.s.s.	15/50	73.0mg	4/50	149.mg	9/50	lun:a/a,a/c.	
65 c55072	56.0mg	283.mg	1/50	30.7mg	5/50	61.9mg	16/50	liv:hpc,nnd.	
a c55072	80.3mg	1.11gm	1/50	30.7mg	3/50	61.9mg	11/50		
b c55072	122.mg	n.s.s.	0/50	30.7mg	3/50	61.9mg	5/50		
c c55072	41.7mg	n.s.s.	48/50	30.7mg	48/50	61.9mg	48/50	liv:hpc,hpc,nnd.	
d c55072	56.0mg	283.mg	1/50	30.7mg	5/50	61.9mg	16/50	liv:nnd; pan:ana. C	
66 c55072	16.2mg	57.9mg	2/50	24.5mg	22/50	49.5mg	23/50		
a c55072	16.3mg	58.7mg	2/50	24.5mg	21/50	49.5mg	23/50	liv:hpc,nnd. S	
b c55072	18.2mg	127.mg	5/50	24.5mg	22/50	49.5mg	23/50		
c c55072	63.4mg	1.04gm	0/50	24.5mg	4/50	49.5mg	6/50	lun:a/a,a/c.	
d c55072	69.7mg	10.1gm	0/50	24.5mg	4/50	49.5mg	5/50		
e c55072	75.9mg	8.53gm	0/50	24.5mg	3/50	49.5mg	5/50	pre:adn,can,sqp. S	
f c55072	26.2mg	n.s.s.	1/50	24.5mg	10/50	(49.5mg	4/50)		
g c55072	130.mg	n.s.s.	0/50	24.5mg	1/50	49.5mg	3/50		
h c55072	68.2mg	n.s.s.	1/50	24.5mg	8/50	49.5mg	4/50		
i c55072	25.7mg	n.s.s.	50/50	24.5mg	49/50	49.5mg	50/50	liv:hpc,hpc,nnd.	
j c55072	18.2mg	127.mg	5/50	24.5mg	22/50	49.5mg	23/50		
CHLORINATED TRISODIUM PHOSPHATE 56802-99-4									
67 c55754	488.mg	48.3gm	0/50	350.mg	4/50	(701.mg	0/50)		S
a c55754	305.mg	n.s.s.	29/50	350.mg	32/50	701.mg	29/50	liv:hpc,hpc,nnd.	
b c55754	774.mg	n.s.s.	6/50	350.mg	8/50	701.mg	6/50	lun:a/a,a/c.	
c c55754	2.31gm	n.s.s.	6/50	350.mg	2/50	701.mg	3/50		
68 c55754	2.02gm	n.s.s.	0/50	352.mg	1/50	707.mg	3/50		S
a c55754	2.54gm	n.s.s.	0/50	352.mg	0/50	707.mg	3/50		S
b c55754	577.mg	n.s.s.	35/50	352.mg	37/50	707.mg	30/50	liv:hpc,hpc,nnd.	
c c55754	812.mg	n.s.s.	14/50	352.mg	14/50	707.mg	17/50	lun:a/a,a/c.	
d c55754	1.22gm	n.s.s.	8/50	352.mg	12/50	707.mg	7/50		
3-CHLORO-2-METHYLPROPENE, TECHNICAL GRADE (CONTAINING 5% DIMETHYLVINYL CHLORIDE) 563-47-3									
69 c54820	57.4mg	124.mg	0/50	70.1mg	16/50	140.mg	31/50	for:sqc,sqp.	
a c54820	60.5mg	134.mg	0/50	70.1mg	15/50	140.mg	29/50		
b c54820	66.0mg	n.s.s.	28/50	70.1mg	32/50	140.mg	37/50	liv:hpc,hpc,nnd.	
c c54820	707.mg	n.s.s.	4/50	70.1mg	3/50	140.mg	1/50	lun:a/a,a/c.	
d c54820	469.mg	n.s.s.	3/50	70.1mg	2/50	140.mg	3/50	for:sqc,sqp.	
70 c54820	49.2mg	141.mg	3/50	70.1mg	24/50	140.mg	36/50		
a c54820	61.5mg	212.mg	3/50	70.1mg	19/50	140.mg	30/50		
b c54820	221.mg	2.76gm	0/50	70.1mg	5/50	140.mg	7/50	liv:hpc,hpc,nnd.	
c c54820	74.5mg	n.s.s.	33/50	70.1mg	42/50	140.mg	45/50	lun:a/a,a/c.	
d c54820	177.mg	n.s.s.	22/50	70.1mg	16/50	(140.mg	13/50)		
e c54820	472.mg	n.s.s.	7/50	70.1mg	10/50	140.mg	3/50	liv:hpc,hpc,nnd.	
71 c54820	149.mg	1.82gm	1/50	52.6mg	1/50	105.mg	10/50	lun:a/a,a/c.	
a c54820	213.mg	n.s.s.	0/50	52.6mg	2/50	105.mg	4/50		S
b c54820	49.7mg	n.s.s.	43/50	52.6mg	42/50	105.mg	41/50	liv:hpc,hpc,nnd.	
c c54820	714.mg	n.s.s.	2/50	52.6mg	1/50	105.mg	0/50		
72 c54820	43.8mg	119.mg	1/50	52.6mg	5/50	105.mg	30/50	liv:hpc,hpc,nnd.	
a c54820	25.0mg	n.s.s.	36/50	52.6mg	43/50	105.mg	43/50		S
b c54820	37.1mg	n.s.s.	40/50	52.6mg	32/50	105.mg	40/50	liv:hpc,hpc,nnd.	
c c54820	204.mg	n.s.s.	2/50	52.6mg	0/50	105.mg	5/50		
CHLOROFORM*** 67-66-3									
73 1671	2.69gm	n.s.s.	2/415	40.0mg	7/410	80.0mg	1/142	180.mg	0/47
a 1671	5.18gm	n.s.s.	19/415	40.0mg	8/410	80.0mg	8/142	180.mg	0/47
b 1671	3.73gm	n.s.s.	21/415	40.0mg	15/410	80.0mg	9/142	180.mg	0/47
c 1671	664.mg	n.s.s.	225/423	40.0mg	217/415	80.0mg	90/142	180.mg	16/47
74 1671	265.mg	1.79gm	5/301	10.0mg	6/313	20.0mg	7/148	45.0mg	3/48
a 1671	305.mg	1.97gm	4/301	10.0mg	4/313	20.0mg	4/148	45.0mg	3/48
b 1671	420.mg	6.25gm	4/301	10.0mg	2/313	20.0mg	3/148	45.0mg	2/48
c 1671	676.mg	n.s.s.	2/303	10.0mg	2/316	20.0mg	1/148	45.0mg	0/48
d 1671	343.mg	n.s.s.	5/303	10.0mg	19/316	20.0mg	5/148	45.0mg	2/48
e 1671	90.2mg	n.s.s.	212/303	10.0mg	227/316	20.0mg	105/148	45.0mg	38/48
75 1681	429.mg	5.42gm	0/18	115.mg	10/40			360.mg	1/44
a 1681	1.63gm	n.s.s.	0/18	115.mg	1/40			360.mg	Jorgenson;faat,5,760-769;1985
b 1681	3.06gm	n.s.s.	0/18	115.mg	0/40				
76 1681	862.mg	n.s.s.	0/22	103.mg	1/28				
a 1681	862.mg	n.s.s.	0/22	103.mg	1/28				
b 1681	862.mg	n.s.s.	0/22	103.mg	1/28				
c 1681	574.mg	n.s.s.	5/22	103.mg	5/28				
								Tumasonis;ees,9,233-240;1985	

Spa	Strain	Site	Xpo+Xpt		TD50	2Tailpvl	
Sex	Route	Hist	Notes		DR	AuOp	
CHLORPHENIRAMINE MALEATE***							
77	M f	b6c gav	TBA MXB	24m24	100ng.....1ug.....10.....100.....1mg.....10.....100.....1g.....10	>	
a	M f	b6c gav	liv	MXB	24m24	no dre P=1. -	
b	M f	b6c gav	lun	MXB	24m24	no dre P=1. -	
78	M m	b6c gav	arp	adn	24m24 s	: ±	
a	M m	b6c gav	sub	MXA	24m24 s	#84.0mg * P<.03 -	
b	M m	b6c gav	sub	MXA	24m24 s	94.7mg * P<.02	
c	M m	b6c gav	sub	fbs	24m24 s	95.2mg * P<.02	
d	M m	b6c gav	TBA	MXB	24m24 s	140. mg * P<.05	
e	M m	b6c gav	Liv	MXB	24m24 s	54.1mg * P<.4	
f	M m	b6c gav	lun	MXB	24m24 s	101. mg * P<.4	
79	R f	f34 gav	TBA	MXB	24m24 s	>	
a	R f	f34 gav	liv	MXB	24m24 s	no dre P=1. -	
80	R m	f34 gav	TBA	MXB	24m24	3.18gm * P<.9	
a	R m	f34 gav	liv	MXB	24m24	no dre P=1. -	
						208. mg * P<.6	
CHOLINE CHLORIDE							
81	R m	f34 eat	liv	nnd	17m24 e	100ng.....1ug.....10.....100.....1mg.....10.....100.....1g.....10	
						> no dre P=1. -	
CHRYSAZIN							
82	M m	cen eat	liv	hpc	77w77 e	100ng.....1ug.....10.....100.....1mg.....10.....100.....1g.....10	
a	M m	cen eat	liv	hpa	77w77 e	- ±	
b	M m	cen eat	liv	mix	77w77 e	336. mg P<.02 +	
83	R m	aci eat	lgi	a/2	69w69 r	201. mg P<.2 +	
a	R m	aci eat	liv	tum	69w69 r	201. mg P<.2 +	
						245. mg P<.003 +	
						no dre P=1. -	
CROTONALDEHYDE							
84	R m	chm	wat	liv	mix	26m26	100ng.....1ug.....10.....100.....1mg.....10.....100.....1g.....10
a	R m	chm	wat	liv	nnd	26m26	4.20mg \ P<.0005+
b	R m	chm	wat	liv	hpc	26m26	4.20mg \ P<.0005
						no dre P=1. -	
DDT***							
85	R m	f34 eat	liv	nnd	17m24 er	100ng.....1ug.....10.....100.....1mg.....10.....100.....1g.....10	
						> 56.2mg P<.2 -	
DIALYLNITROSAMINE							
86	H b	syg	gav	trh	ppp	53w59 ae	100ng.....1ug.....10.....100.....1mg.....10.....100.....1g.....10
a	H b	syg	gav	ncp	adc	53w59 ae	- + .
b	H b	syg	gav	lar	ppp	53w59 ae	2.84mg * P<.0005
c	H b	syg	gav	phr	pam	53w59 ae	2.86mg * P<.0005+
d	H b	syg	gav	liv	cho	53w59 ae	3.69mg Z P<.0005
e	H b	syg	gav	lun	ade	53w59 ae	25.3mg * P<.2
f	H b	syg	gav	tba	mix	53w59 ae	743. mg * P<1.
87	R f	bd9	wat	npc	mix	24m24 r	no dre P=1. -
a	R f	bd9	wat	npc	adc	24m24 r	1.54mg * P<.0005+
88	R m	bd9	wat	npc	mix	24m24 r	32.1mg * P<.0005+
a	R m	bd9	wat	npc	adc	24m24 r	33.6mg * P<.0005+
						36.0mg Z P<.0005+	
						46.9mg Z P<.0005+	
O,S-DIBENZOYL THIAMINE.HCl							
89	R f	sda	eat	liv	hga	24m24 e	100ng.....1ug.....10.....100.....1mg.....10.....100.....1g.....10
a	R f	sda	eat	tba	mix	24m24 e	> no dre P=1. -
b	R f	sda	eat	tba	mal	24m24 e	no dre P=1. -
90	R m	sda	eat	liv	lcm	24m24 e	14.3gm * P<.9 -
a	R m	sda	eat	liv	lcb	24m24 e	> 6.77gm * P<.2 -
b	R m	sda	eat	tba	mal	24m24 e	6.98gm * P<.2 -
c	R m	sda	eat	tba	mix	24m24 e	2.34gm / P<.4 -
						no dre P=1. -	
1,2-DIBROMOETHANE***							
91	M f	b6c	wat	for	mix	73w73 e	100ng.....1ug.....10.....100.....1mg.....10.....100.....1g.....10
a	M f	b6c	wat	for	sqc	73w73 e	- + .
b	M f	b6c	wat	eso	sqp	73w73 e	13.1mg P<.0005+
c	M f	b6c	wat	lun	ptm	73w73 e	24.5mg P<.0005+
d	M f	b6c	wat	liv	tum	73w73 e	318. mg P<.02 +
e	M f	b6c	wat	tba	mix	73w73 e	2.34gm P<.7 -
92	M f	b6c	wat	for	pam	78w78 e	no dre P=1. -
a	M f	b6c	wat	for	sqc	78w78 e	13.8mg P<.0005
b	M f	b6c	wat	eso	pam	78w78 e	23.2mg P<.0005
c	M f	b6c	wat	liv	hpt	78w78 e	35.3mg P<.0005+
d	M f	b6c	wat	lun	ptm	78w78 e	217. mg P<.004
e	M f	b6c	wat	tba	mix	78w78 e	no dre P=1. -
93	M m	b6c	wat	for	sqc	65w65 e	no TD50 P<.2
a	M m	b6c	wat	for	mix	65w65 e	11.8mg P<.0005+
b	M m	b6c	wat	liv	tum	65w65 e	11.9mg P<.0005+
c	M m	b6c	wat	lun	ptm	65w65 e	no dre P=1. -
d	M m	b6c	wat	tba	mix	65w65 e	no dre P=1. -
94	M m	b6c	wat	for	sqc	78w78 e	12.7mg P<.0005
a	M m	b6c	wat	eso	sqc	78w78 e	9.44mg P<.0005+
						207. mg P<.003	

RefNum	LoConf	UpConf	Cntrl	1Dose	1Inc	2Dose	2Inc	Citation or Pathology	Brkly Code
CHLORPHENIRAMINE MALEATE*** 113-92-8									
77	c55265	66.8mg n.s.s.	37/50	70.7mg	35/50	(142.0mg)	20/50		
a	c55265	498.0mg n.s.s.	6/50	70.7mg	3/50	142.0mg	5/50	liv:hpc,nnd.	
b	c55265	480.0mg n.s.s.	6/50	70.7mg	6/50	142.0mg	4/50	lun:a/a,a/c.	
78	c55265	34.7mg n.s.s.	2/50	17.7mg	7/50	35.4mg	4/50		S
a	c55265	39.7mg n.s.s.	4/50	17.7mg	5/50	35.4mg	8/50	sub:fbs,fib,nfs,scrn.	S
b	c55265	41.2mg 13.1gm	3/50	17.7mg	4/50	35.4mg	8/50	sub:fbs,nfs,scrn.	S
c	c55265	51.1mg n.s.s.	3/50	17.7mg	3/50	35.4mg	6/50		S
d	c55265	14.3mg n.s.s.	39/50	17.7mg	36/50	35.4mg	21/50		
e	c55265	25.8mg n.s.s.	16/50	17.7mg	19/50	35.4mg	9/50	liv:hpc,nnd.	
f	c55265	105.0mg n.s.s.	16/50	17.7mg	5/50	35.4mg	3/50	lun:a/a,a/c.	
79	c55265	21.5mg n.s.s.	42/50	21.2mg	30/50	42.5mg	8/50		
a	c55265	96.6mg n.s.s.	2/50	21.2mg	0/50	42.5mg	1/50	liv:hpc,nnd.	
80	c55265	14.2mg n.s.s.	44/50	10.6mg	41/50	21.2mg	31/50		
a	c55265	38.5mg n.s.s.	5/50	10.6mg	3/50	21.2mg	6/50	liv:hpc,nnd.	
CHOLINE CHLORIDE 67-48-1									
81	1803	764.0mg n.s.s.	2/28	280.0mg	2/28			Shivapurkar;carc,7,547-550;1986	
CHRYSAZIN (danthron) 117-10-2									
82	1796	115.0mg n.s.s.	0/19	240.0mg	4/17			Mori;gann,77,871-876;1986	
a	1796	65.2mg n.s.s.	5/19	240.0mg	9/17				
b	1796	65.2mg n.s.s.	5/19	240.0mg	9/17				
83	1725	104.0mg 1.06gm	0/15	400.0mg	7/18			Mori;bjca,52,781-783;1985	
a	1725	653.0mg n.s.s.	0/15	400.0mg	0/18				
CROTONALDEHYDE (trans-2-butenal) 123-73-9									
84	1774	1.96mg 12.8mg	0/23	2.10mg	9/27	(21.0mg)	1/23		Chung;canr,46,1285-1289;1986
a	1774	1.96mg 12.8mg	0/23	2.10mg	9/27	(21.0mg)	1/23		
b	1774	94.1mg n.s.s.	0/23	2.10mg	2/27	21.0mg	0/23		
DDT*** 50-29-3									
85	1803	17.6mg n.s.s.	2/28	14.0mg	6/28			Shivapurkar;carc,7,547-550;1986	
DIALLYLNITROSAMINE 16338-97-9									
86	1826	1.86mg 5.49mg	0/30	3.11mg	11/28	6.21mg	8/27	12.4mg	15/27
a	1826	1.85mg 4.74mg	0/30	3.11mg	1/28	6.21mg	13/27	12.4mg	18/27
b	1826	2.33mg 11.8mg	0/30	3.11mg	13/28	6.21mg	1/27	12.4mg	14/27
c	1826	9.60mg n.s.s.	0/30	3.11mg	1/28	6.21mg	3/27	12.4mg	1/27
d	1826	n.s.s. n.s.s.	1/30	3.11mg	1/28	6.21mg	1/27	12.4mg	1/27
e	1826	23.6mg n.s.s.	0/30	3.11mg	1/28	6.21mg	0/27	12.4mg	0/27
f	1826	.933mg 3.37mg	7/30	3.11mg	18/28	6.21mg	16/27	12.4mg	24/27
87	1714	20.9mg 53.2mg	0/20	20.0mg	6/20	40.0mg	17/20	80.0mg	13/20
a	1714	21.8mg 56.3mg	0/20	20.0mg	6/20	40.0mg	16/20	80.0mg	13/20
88	1714	19.7mg 75.0mg	0/20	20.0mg	0/20	40.0mg	16/20	(80.0mg)	15/20
a	1714	29.0mg 81.8mg	0/20	20.0mg	0/20	40.0mg	13/20	80.0mg	14/20
O,S-DIBENZOYL THIAMINE.HCl 35660-60-7									
89	1728	4.65mg n.s.s.	0/55	50.0mg	1/55	500.0mg	0/55		Heywood;txlt,26,53-58;1985
a	1728	212.0mg n.s.s.	53/55	50.0mg	50/55	500.0mg	51/55		
b	1728	998.0mg n.s.s.	13/55	50.0mg	18/55	500.0mg	16/55		
90	1728	1.75gm n.s.s.	1/55	40.0mg	0/55	400.0mg	3/55		
a	1728	1.14gm n.s.s.	0/21	40.0mg	0/25	400.0mg	1/23		
b	1728	544.0mg n.s.s.	25/55	40.0mg	13/55	400.0mg	24/55		
c	1728	429.0mg n.s.s.	48/55	40.0mg	42/55	400.0mg	42/55		
1,2-DIBROMOETHANE** (ethylene dibromide, EDB) 106-93-4									
91	1761	6.68mg 25.7mg	1/50	103.0mg	27/29			Van Durren;tcam,5,393-403;1985	
a	1761	13.9mg 46.5mg	0/50	103.0mg	22/29				
b	1761	96.3mg n.s.s.	0/50	103.0mg	3/29				
c	1761	175.0mg 1.58gm	1/50	103.0mg	1/29				
d	1761	303.0mg n.s.s.	0/50	103.0mg	0/29				
e	1761	6.84mg 28.6mg	7/50	103.0mg	27/29				
92	1806	13.9mg 44.8mg	9/96	48.0mg	29/49			Van Duuren;enhp,69,109-117;1986	
a	1806	20.7mg 67.1mg	0/96	48.0mg	20/49				
b	1806	75.0mg 1.58gm	0/96	48.0mg	4/49				
c	1806	273.0mg n.s.s.	2/96	48.0mg	0/49				
d	1806	192.0mg n.s.s.	13/96	48.0mg	2/49				
e	1806	n.s.s. n.s.s.	84/96	48.0mg	49/49				
93	1761	5.98mg 23.1mg	0/45	116.0mg	26/28			Van Durren;tcam,5,393-403;1985	
a	1761	6.01mg 23.5mg	1/45	116.0mg	26/28				
b	1761	261.0mg n.s.s.	0/45	116.0mg	0/28				
c	1761	146.0mg n.s.s.	5/45	116.0mg	2/28				
d	1761	6.21mg 27.4mg	8/45	116.0mg	26/28				
94	1806	5.97mg 15.5mg	2/99	46.7mg	41/48			Van Duuren;enhp,69,109-117;1986	
a	1806	71.4mg 1.40gm	0/99	46.7mg	4/48				

Spec Strain Site Xpo+Xpt			TD50	2Tailpvl
Sex Route Hist Notes			DR	AuOp
b M m b6c wat eso pam 78w78 e			207.mg	P<.003
c M m b6c wat liv hpt 78w78 e			no dre	P=1.
d M m b6c wat tba mix 78w78 e			noTD50	P<.05
1,4-DICHLOROBENZENE	100ng....1ug....10.....100.....1mg....10.....100.....1g....10			
95 M f b6c gav liv MXA 24m24		:	483.mg / P<.005 c	
a M f b6c gav liv hpc 24m24			852.mg / P<.005 c	
b M f b6c gav liv hpa 24m24			1.03gm / P<.06 c	
c M f b6c gav thy fca 24m24			5.09gm * P<.05	
d M f b6c gav TBA MXB 24m24			870.mg * P<.4	
e M f b6c gav liv MXB 24m24			483.mg / P<.005	
f M f b6c gav lun MXB 24m24			no dre P=1.	
96 M m b6c gav liv MXA 24m24		:	339.mg / P<.005 c	
a M m b6c gav liv hpc 24m24			559.mg / P<.02 c	
b M m b6c gav liv hpa 24m24			700.mg * P<.03	
c M m b6c gav amd MXA 24m24			2.24gm * P<.03	
d M m b6c gav liv hpb 24m24			3.51gm * P<.03	
e M m b6c gav TBA MXB 24m24			1.31gm * P<.6	
f M m b6c gav liv MXB 24m24			339.mg / P<.005	
g M m b6c gav lun MXB 24m24			666.mg \ P<.2	
97 R f f34 gav TBA MXB 24m24		:>	no dre P=1. -	
a R f f34 gav liv MXB 24m24			9.29gm * P<.5	
98 R m f34 gav kid MXA 24m24		:	586.mg * P<.005	
a R m f34 gav kid uac 24m24			644.mg * P<.009 c	
b R m f34 gav mul mnl 24m24			615.mg * P<.05	
c R m f34 gav TBA MXB 24m24			224.mg * P<.2	
d R m f34 gav liv MXB 24m24			no dre P=1.	
1,2-DICHLOROPROPANE	100ng....1ug....10.....100.....1mg....10.....100.....1g....10			
99 M f b6c gav liv MXA 24m24 s		:	346.mg * P<.008 p	
a M f b6c gav liv hpa 24m24 s			562.mg * P<.04 p	
b M f b6c gav for MXA 24m24 s			1.02gm * P<.03	
c M f b6c gav TBA MXB 24m24 s			341.mg * P<.4	
d M f b6c gav liv MXB 24m24 s			346.mg * P<.008	
e M f b6c gav lun MXB 24m24 s			no dre P=1.	
100 M m b6c gav liv MXA 24m24		:	229.mg * P<.05 p	
a M m b6c gav liv hpa 24m24			384.mg * P<.05 p	
b M m b6c gav for sqp 24m24			1.52gm * P<.05	
c M m b6c gav TBA MXB 24m24			397.mg * P<.4	
d M m b6c gav liv MXB 24m24			229.mg * P<.05	
e M m b6c gav lun MXB 24m24			5.07gm * P<.9	
101 R f f34 gav mgl acn 24m24		:	767.mg * P<.03 e	
a R f f34 gav TBA MXB 24m24			240.mg * P<.3	
b R f f34 gav liv MXB 24m24			no dre P=1.	
102 R f f34 gav TBA MXB 24m25		:	69.7mg / P<.04 -	
a R m f34 gav liv MXB 24m25			2.57gm * P<.8	
DIGLYCIDYL RESORCINOL ETHER, TECHNICAL GRADE10.....100.....1mg....10.....100.....1g....10			
103 M f b6c gav sto MXA 24m24 s		:	17.9mg * P<.0005c	
a M f b6c gav sto sqc 24m24 s			36.3mg * P<.0005c	
b M f b6c gav sto MXA 24m24 s			48.2mg * P<.0005c	
c M f b6c gav liv hpc 24m24 s			221.mg * P<.02	
d M f b6c gav TBA MXB 24m24 s			32.3mg * P<.007	
e M f b6c gav liv MXB 24m24 s			169.mg * P<.06	
f M f b6c gav lun MXB 24m24 s			4.79gm * P<1.	
104 M m b6c gav sto MXA 24m24 s		:	37.8mg * P<.0005c	
a M m b6c gav sto sqc 24m24 s			55.5mg * P<.0005c	
b M m b6c gav sto MXA 24m24 s			145.mg * P<.0005c	
c M m b6c gav TBA MXB 24m24 s			36.6mg \ P<.2	
d M m b6c gav liv MXB 24m24 s			84.7mg \ P<.3	
e M m b6c gav lun MXB 24m24 s			1.35gm * P<.8	
105 R f f34 gav sto MXB 24m24 s		:	4.47mg * P<.0005	
a R f f34 gav sto sqc 24m24 s			5.10mg * P<.0005c	
b R f f34 gav sto sqp 24m24 s			45.5mg * P<.0005c	
c R f f34 gav TBA MXB 24m24 s			8.53mg * P<.004	
d R f f34 gav liv MXB 24m24 s			no dre P=1.	
106 R f f34 gav for MXB 24m24		:	3.53mg P<.0005	
a R f f34 gav for sqc 24m24			5.93mg P<.0005c	
b R f f34 gav for sqp 24m24			8.95mg P<.0005c	
c R f f34 gav TBA MXB 24m24			16.0mg P<.4	
d R f f34 gav liv MXB 24m24			174.mg P<.6	
107 R m f34 gav tes ict 23m24 a		:	2.35mg / P<.0005	
a R m f34 gav sto MXB 23m24 a			2.89mg * P<.0005	
b R m f34 gav sto sqc 23m24 a			3.06mg * P<.0005c	
c R m f34 gav pit adn 23m24 a			12.2mg * P<.008	

RefNum	LoConf	UpConf	Cntrl	1Dose	1inc	2Dose	2inc	Citation or Pathology	Brkly Code
b	1806	71.4mg	1.40gm	0/99	46.7mg	4/48			
c	1806	215.mg	n.s.s.	12/99	46.7mg	1/48			
d	1806	n.s.s.	n.s.s.	76/99	46.7mg	48/48			
1,4-DICHLOROBENZENE 106-46-7									
95	c54955	244.mg	4.20gm	15/50	212.mg	10/50	424.mg	36/50	liv:hpc,hpc.
a	c54955	427.mg	7.32gm	5/50	212.mg	5/50	424.mg	19/50	
b	c54955	422.mg	n.s.s.	10/50	212.mg	6/50	424.mg	21/50	
c	c54955	1.54gm	n.s.s.	0/50	212.mg	0/50	424.mg	3/50	
d	c54955	220.mg	n.s.s.	37/50	212.mg	36/50	424.mg	46/50	
e	c54955	244.mg	4.20gm	15/50	212.mg	10/50	424.mg	36/50	liv:hpc,hpc,nnd.
f	c54955	2.27gm	n.s.s.	5/50	212.mg	5/50	424.mg	1/50	lun:a/a,a/c.
96	c54955	172.mg	3.15gm	17/50	212.mg	22/50	424.mg	40/50	liv:hpc,hpc.
a	c54955	267.mg	n.s.s.	14/50	212.mg	11/50	424.mg	32/50	
b	c54955	324.mg	n.s.s.	5/50	212.mg	13/50	424.mg	16/50	
c	c54955	916.mg	n.s.s.	0/50	212.mg	2/50	424.mg	4/50	smd:phe,phm. S
d	c54955	1.21gm	n.s.s.	0/50	212.mg	0/50	424.mg	4/50	S
e	c54955	230.mg	n.s.s.	35/50	212.mg	33/50	424.mg	42/50	
f	c54955	172.mg	3.15gm	17/50	212.mg	22/50	424.mg	40/50	liv:hpc,hpc,nnd.
g	c54955	213.mg	n.s.s.	6/50	212.mg	13/50	(424.mg	2/50)	lun:a/a,a/c.
97	c54955	289.mg	n.s.s.	43/50	212.mg	45/50	424.mg	36/50	
a	c54955	1.62gm	n.s.s.	1/50	212.mg	1/50	424.mg	2/50	liv:hpc,hpc,nnd.
98	c54955	270.mg	5.06gm	1/50	106.mg	3/50	212.mg	8/50	kid:tla,uac. S
a	c54955	285.mg	20.0gm	1/50	106.mg	3/50	212.mg	7/50	
b	c54955	250.mg	n.s.s.	5/50	106.mg	7/50	212.mg	11/50	
c	c54955	78.2mg	n.s.s.	38/50	106.mg	38/50	212.mg	38/50	
d	c54955	933.mg	n.s.s.	2/50	106.mg	2/50	212.mg	0/50	liv:hpc,hpc,nnd.
1,2-DICHLOROPROPANE (propylene dichloride) 78-87-5									
99	c55141	168.mg	6.75gm	2/50	86.8mg	8/50	175.mg	9/50	liv:hpc,hpc.
a	c55141	235.mg	n.s.s.	1/50	86.8mg	5/50	175.mg	5/50	
b	c55141	387.mg	n.s.s.	0/50	86.8mg	2/50	175.mg	3/50	for:sqc,sqp. S
c	c55141	92.1mg	n.s.s.	35/50	86.8mg	29/50	175.mg	34/50	
d	c55141	168.mg	6.75gm	2/50	86.8mg	8/50	175.mg	9/50	liv:hpc,hpc,nnd.
e	c55141	1.07gm	n.s.s.	6/50	86.8mg	1/50	175.mg	1/50	lun:a/a,a/c.
100	c55141	98.6mg	n.s.s.	18/50	86.8mg	26/50	175.mg	33/50	liv:hpc,hpc.
a	c55141	165.mg	n.s.s.	7/50	86.8mg	10/50	175.mg	17/50	
b	c55141	524.mg	n.s.s.	0/50	86.8mg	1/50	175.mg	3/50	
c	c55141	102.mg	n.s.s.	33/50	86.8mg	36/50	175.mg	42/50	
d	c55141	98.6mg	n.s.s.	18/50	86.8mg	26/50	175.mg	33/50	liv:hpc,hpc,nnd.
e	c55141	312.mg	n.s.s.	11/50	86.8mg	8/50	175.mg	12/50	lun:a/a,a/c.
101	c55141	294.mg	n.s.s.	1/50	86.8mg	2/50	175.mg	5/50	
a	c55141	72.5mg	n.s.s.	42/50	86.8mg	46/50	175.mg	30/50	liv:hpc,hpc,nnd.
b	c55141	2.18gm	n.s.s.	1/50	86.8mg	0/50	175.mg	0/50	
102	c55141	29.8mg	n.s.s.	45/50	42.8mg	37/50	86.4mg	43/50	
a	c55141	208.mg	n.s.s.	3/50	42.8mg	3/50	86.4mg	2/50	liv:hpc,hpc,nnd.
DIGLYCIDYL RESORCINOL ETHER, TECHNICAL GRADE 101-90-6									
103	c54966	11.9mg	27.9mg	0/50	35.0mg	17/50	70.1mg	33/50	sto:pas,sqc,sqp.
a	c54966	23.1mg	59.8mg	0/50	35.0mg	12/50	70.1mg	23/50	
b	c54966	25.4mg	113.mg	0/50	35.0mg	5/50	70.1mg	10/50	sto:pas,sqp.
c	c54966	74.9mg	n.s.s.	0/50	35.0mg	1/50	70.1mg	3/50	S
d	c54966	15.5mg	484.mg	28/50	35.0mg	27/50	70.1mg	38/50	
e	c54966	58.0mg	n.s.s.	3/50	35.0mg	1/50	70.1mg	7/50	liv:hpc,hpc,nnd.
f	c54966	112.mg	n.s.s.	3/50	35.0mg	3/50	70.1mg	2/50	sto:pas,sqc,sqp.
104	c54966	26.5mg	56.5mg	0/50	35.0mg	17/50	70.4mg	33/50	
a	c54966	37.4mg	88.8mg	0/50	35.0mg	14/50	70.4mg	25/50	sto:pas,sqp.
b	c54966	78.0mg	423.mg	0/50	35.0mg	4/50	70.4mg	10/50	
c	c54966	12.6mg	n.s.s.	31/50	35.0mg	40/50	(70.4mg	41/50)	liv:hpc,hpc,nnd.
d	c54966	24.7mg	n.s.s.	13/50	35.0mg	18/50	(70.4mg	11/50)	lun:a/a,a/c.
e	c54966	156.mg	n.s.s.	6/50	35.0mg	2/50	70.4mg	8/50	sto:pas,sqc,sqp. C
105	c54966	2.88mg	7.26mg	0/50	17.7mg	38/50	35.4mg	4/50	
a	c54966	3.23mg	8.51mg	0/50	17.7mg	34/50	35.4mg	3/50	
b	c54966	19.4mg	141.mg	0/50	17.7mg	7/50	35.4mg	1/50	
c	c54966	4.09mg	64.0mg	46/50	17.7mg	41/50	35.4mg	6/50	
d	c54966	66.5mg	n.s.s.	1/50	17.7mg	0/50	35.4mg	0/50	liv:hpc,hpc,nnd.
106	c54967	2.36mg	5.59mg	0/50	8.45mg	38/50			for:sqc,sqp. C
a	c54967	3.72mg	10.3mg	0/50	8.45mg	27/50			
b	c54967	5.20mg	17.3mg	0/50	8.45mg	19/50			
c	c54967	3.84mg	n.s.s.	45/50	8.45mg	49/50			liv:hpc,hpc,nnd.
d	c54967	24.5mg	n.s.s.	2/50	8.45mg	3/50			
107	c54966	1.33mg	4.84mg	47/50	17.7mg	39/50	35.7mg	11/50	
a	c54966	1.61mg	5.01mg	0/50	17.7mg	45/50	35.7mg	10/50	sto:sqc,sqp. C
b	c54966	1.67mg	5.54mg	0/50	17.7mg	38/50	35.7mg	4/50	
c	c54966	4.25mg	446.mg	17/50	17.7mg	8/50	35.7mg	2/50	S

Spe	Strain	Site	Xpo+Xpt		TD50	2Tailpvl
Sex	Route	Hist	Notes		DR	AuOp
d	R m	f34 gav sto sqp	23m24 a		24.7mg *	P<.0005c
e	R m	f34 gav TBA MXB	23m24 a		2.43mg *	P<.0005
f	R m	f34 gav liv MXB	23m24 a		114. mg *	P<.3
108	R m	f34 gav for MXB	24m24	:	2.33mg	P<.0005
a	R m	f34 gav for sqc	24m24		2.73mg	P<.0005c
b	R m	f34 gav for sqp	24m24		8.16mg	P<.0005c
c	R m	f34 gav TBA MXB	24m24		4.61mg	P<.006
d	R m	f34 gav liv MXB	24m24		640. mg	P<.9
DIMETHYLVINYL CHLORIDE			100ng.....1ug.....10.....100.....1mg.....10.....100.....1g.....10			
109	M f	b6c gav for MXA	24m24	:	14.3mg \	P<.0005c
a	M f	b6c gav for MXA	24m24		14.3mg \	P<.0005c
b	M f	b6c gav for sqc	24m24		14.4mg \	P<.0005c
c	M f	b6c gav for MXA	24m24		14.4mg \	P<.0005c
d	M f	b6c gav MXA MXA	24m24		124. mg /	P<.004
e	M f	b6c gav hag ppa	24m24		146. mg *	P<.0005
f	M f	b6c gav liv hpa	24m24		150. mg *	P<.007
g	M f	b6c gav lun MXA	24m24		186. mg *	P<.003
h	M f	b6c gav lun a/a	24m24		235. mg *	P<.004
i	M f	b6c gav for sqp	24m24		373. mg *	P<.005 c
j	M f	b6c gav MXA MXA	24m24		229. mg *	P<.04
k	M f	b6c gav TBA MXB	24m24		14.6mg *	P<.0005
l	M f	b6c gav liv MXB	24m24		150. mg *	P<.007
m	M f	b6c gav lun MXB	24m24		186. mg *	P<.003
110	M m	b6c gav MXB MXB	24m24	:	15.2mg *	P<.0005
a	M m	b6c gav for MXA	24m24		15.5mg *	P<.0005c
b	M m	b6c gav for sqc	24m24		17.2mg *	P<.0005c
c	M m	b6c gav liv MXA	24m24		48.8mg *	P<.0005
d	M m	b6c gav liv hpa	24m24		87.1mg *	P<.0005
e	M m	b6c gav lun MXA	24m24		87.7mg *	P<.0005
f	M m	b6c gav pre sqc	24m24		90.7mg /	P<.0005c
g	M m	b6c gav liv hpc	24m24		104. mg *	P<.0005
h	M m	b6c gav lun a/a	24m24		117. mg *	P<.002
i	M m	b6c gav MXA MXA	24m24		148. mg *	P<.008
j	M m	b6c gav hag ppa	24m24		149. mg *	P<.004
k	M m	b6c gav MXA MXA	24m24		154. mg *	P<.009
l	M m	b6c gav for sqp	24m24		195. mg *	P<.0005c
m	M m	b6c gav lun a/c	24m24		199. mg *	P<.007
n	M m	b6c gav MXA MXA	24m24		221. mg *	P<.008
o	M m	b6c gav MXA MXA	24m24		375. mg *	P<.03
p	M m	b6c gav TBA MXB	24m24		13.9mg *	P<.0005
q	M m	b6c gav liv MXB	24m24		48.8mg *	P<.0005
r	M m	b6c gav lun MXB	24m24		87.7mg *	P<.0005
111	R f	f34 gav MXB MXB	23m24 a	:	25.3mg /	P<.0005
a	R f	f34 gav nas MXA	23m24 a		34.3mg /	P<.0005c
b	R f	f34 gav nas MXA	23m24 a		35.2mg /	P<.0005c
c	R f	f34 gav mgl MXA	23m24 a		36.7mg /	P<.0005
d	R f	f34 gav mgl fba	23m24 a		38.3mg /	P<.0005
e	R f	f34 gav nas MXA	23m24 a		46.8mg /	P<.0005c
f	R f	f34 gav nas can	23m24 a		52.7mg /	P<.0005c
g	R f	f34 gav pta MXA	23m24 a		68.0mg *	P<.004
h	R f	f34 gav pta MXA	23m24 a		71.7mg *	P<.006
i	R f	f34 gav ute MXA	23m24 a		84.9mg *	P<.002
j	R f	f34 gav ute esp	23m24 a		91.9mg *	P<.004
k	R f	f34 gav for MXA	23m24 a		95.2mg *	P<.0005c
l	R f	f34 gav thy MXA	23m24 a		131. mg *	P<.002
m	R f	f34 gav thy fcc	23m24 a		136. mg *	P<.004
n	R f	f34 gav nas MXA	23m24 a		143. mg /	P<.0005c
o	R f	f34 gav nas adc	23m24 a		159. mg /	P<.0005c
p	R f	f34 gav for sqc	23m24 a		191. mg *	P<.0005c
q	R f	f34 gav for sqp	23m24 a		209. mg *	P<.008 c
r	R f	f34 gav lun MXA	23m24 a		218. mg *	P<.002
s	R f	f34 gav eso sqc	23m24 a		250. mg *	P<.003 c
t	R f	f34 gav MXA MXA	23m24 a		318. mg /	P<.0005c
u	R f	f34 gav MXA MXA	23m24 a		1.01gm /	P<.006 c
v	R f	f34 gav pta MXA	23m24 a		101. mg *	P<.03
w	R f	f34 gav pta cra	23m24 a		109. mg *	P<.04
x	R f	f34 gav mul MXA	23m24 a		170. mg *	P<.02
y	R f	f34 gav mul mnl	23m24 a		202. mg *	P<.04
z	R f	f34 gav pta crc	23m24 a		222. mg *	P<.02
A	R f	f34 gav thy cca	23m24 a		225. mg *	P<.04
B	R f	f34 gav orm sqp	23m24 a		1.22gm /	P<.02 c
C	R f	f34 gav TBA MXB	23m24 a		11.9mg /	P<.0005
D	R f	f34 gav liv MXB	23m24 a		no dre	P=1.
112	R m	f34 gav tes ict	22m24 a	:	13.9mg /	P<.0005

RefNum	LoConf	UpConf	Cntrl	1Dose	1Inc	2Dose	2Inc	Citation or Pathology	Brkly Code
d c54966	14.5mg	45.0mg	0/50	17.7mg	17/50	35.7mg	6/50		
e c54966	1.41mg	4.70mg	39/50	17.7mg	47/50	35.7mg	11/50		
f c54966	14.0mg	n.s.s.	1/50	17.7mg	1/50	35.7mg	0/50		
108 c54967	1.55mg	3.66mg	0/50	8.49mg	44/50				
a c54967	1.79mg	4.38mg	0/50	8.49mg	39/50				
b c54967	4.42mg	17.1mg	0/50	8.49mg	16/50				
c c54967	2.19mg	61.9mg	40/50	8.49mg	49/50				
d c54967	29.7mg	n.s.s.	1/50	8.49mg	1/50				
DIMETHYLVINYL CHLORIDE 513-37-1									
109 c54819	8.29mg	24.3mg	0/50	71.4mg	41/50	(142.mg	36/50)		
a c54819	8.29mg	24.3mg	0/50	71.4mg	41/50	(142.mg	38/50)		
b c54819	8.34mg	24.8mg	0/50	71.4mg	40/50	(142.mg	36/50)		
c c54819	8.34mg	24.8mg	0/50	71.4mg	40/50	(142.mg	38/50)		
d c54819	45.7mg	1.32gm	10/50	71.4mg	2/50	142.mg	10/50		
e c54819	52.9mg	489.mg	0/50	71.4mg	3/50	142.mg	5/50		
f c54819	50.0mg	3.68gm	4/50	71.4mg	4/50	142.mg	4/50		
g c54819	58.7mg	1.62gm	3/50	71.4mg	1/50	142.mg	7/50		
h c54819	68.5mg	2.72gm	2/50	71.4mg	1/50	142.mg	6/50		
i c54819	83.4mg	5.10gm	0/50	71.4mg	1/50	142.mg	3/50		
j c54819	64.1mg	n.s.s.	6/50	71.4mg	1/50	142.mg	5/50		
k c54819	9.20mg	25.3mg	32/50	71.4mg	45/50	142.mg	43/50		
l c54819	50.0mg	3.68gm	4/50	71.4mg	4/50	142.mg	4/50		
m c54819	58.7mg	1.62gm	3/50	71.4mg	1/50	142.mg	7/50		
110 c54819	9.93mg	23.6mg	2/50	71.4mg	44/50	142.mg	42/50		
a c54819	10.1mg	23.7mg	1/50	71.4mg	43/50	142.mg	41/50		
b c54819	11.2mg	26.2mg	0/50	71.4mg	42/50	142.mg	35/50		
c c54819	24.0mg	133.mg	11/50	71.4mg	12/50	142.mg	13/50		
d c54819	36.4mg	407.mg	8/50	71.4mg	7/50	142.mg	8/50		
e c54819	37.2mg	355.mg	6/50	71.4mg	9/50	142.mg	8/50		
f c54819	41.8mg	213.mg	1/50	71.4mg	3/50	142.mg	16/50		
g c54819	44.3mg	375.mg	3/50	71.4mg	6/50	142.mg	7/50		
h c54819	43.2mg	778.mg	3/50	71.4mg	6/50	142.mg	4/50		
i c54819	51.1mg	4.32gm	6/50	71.4mg	6/50	142.mg	6/50		
j c54819	50.4mg	1.51gm	2/50	71.4mg	3/50	142.mg	3/50		
k c54819	52.0mg	7.57gm	6/50	71.4mg	5/50	142.mg	6/50		
l c54819	66.8mg	827.mg	1/50	71.4mg	3/50	142.mg	8/50		
m c54819	65.5mg	3.86gm	3/50	71.4mg	4/50	142.mg	5/50		
n c54819	68.2mg	5.79gm	2/50	71.4mg	3/50	142.mg	4/50		
o c54819	83.9mg	n.s.s.	1/50	71.4mg	1/50	142.mg	3/50		
p c54819	8.92mg	23.2mg	26/50	71.4mg	47/50	142.mg	46/50		
q c54819	24.0mg	133.mg	11/50	71.4mg	12/50	142.mg	13/50		
r c54819	37.2mg	355.mg	6/50	71.4mg	9/50	142.mg	8/50		
111 c54819	15.9mg	40.5mg	1/50	70.7mg	25/50	143.mg	36/50		
a c54819	20.8mg	55.6mg	0/50	70.7mg	17/50	143.mg	35/50		
b c54819	21.1mg	57.5mg	0/50	70.7mg	16/50	143.mg	35/50		
c c54819	19.1mg	89.9mg	11/50	70.7mg	21/50	143.mg	5/50		
d c54819	19.5mg	98.1mg	10/50	70.7mg	18/50	143.mg	5/50		
e c54819	26.9mg	77.7mg	0/50	70.7mg	13/50	143.mg	29/50		
f c54819	29.2mg	89.1mg	0/50	70.7mg	11/50	143.mg	28/50		
g c54819	29.5mg	616.mg	17/50	70.7mg	17/50	143.mg	2/50		
h c54819	30.3mg	940.mg	17/50	70.7mg	16/50	143.mg	2/50		
i c54819	35.3mg	543.mg	8/50	70.7mg	12/50	143.mg	2/50		
j c54819	36.6mg	801.mg	8/50	70.7mg	11/50	143.mg	2/50		
k c54819	40.2mg	313.mg	1/50	70.7mg	9/50	143.mg	2/50		
l c54819	44.3mg	994.mg	1/50	70.7mg	5/50	143.mg	1/50		
m c54819	44.9mg	1.55gm	1/50	70.7mg	5/50	143.mg	0/50		
n c54819	54.6mg	412.mg	0/50	70.7mg	4/50	143.mg	6/50		
o c54819	56.8mg	504.mg	0/50	70.7mg	3/50	143.mg	6/50		
p c54819	65.9mg	832.mg	0/50	70.7mg	5/50	143.mg	1/50		
q c54819	62.0mg	7.92gm	1/50	70.7mg	4/50	143.mg	1/50		
r c54819	70.5mg	1.11gm	0/50	70.7mg	4/50	143.mg	1/50		
s c54819	72.5mg	1.89gm	0/50	70.7mg	3/50	143.mg	1/50		
t c54819	117.mg	1.13gm	0/50	70.7mg	2/50	143.mg	5/50		
u c54819	343.mg	10.5gm	0/50	70.7mg	0/50	143.mg	4/50		
v c54819	37.4mg	n.s.s.	16/50	70.7mg	13/50	143.mg	2/50		
w c54819	38.9mg	n.s.s.	16/50	70.7mg	12/50	143.mg	2/50		
x c54819	59.6mg	n.s.s.	5/50	70.7mg	8/50	143.mg	1/50		
y c54819	64.5mg	n.s.s.	5/50	70.7mg	7/50	143.mg	1/50		
z c54819	64.6mg	n.s.s.	1/50	70.7mg	4/50	143.mg	0/50		
A c54819	64.4mg	n.s.s.	3/50	70.7mg	4/50	143.mg	1/50		
B c54819	369.mg	n.s.s.	0/50	70.7mg	0/50	143.mg	3/50		
C c54819	7.69mg	19.4mg	33/50	70.7mg	48/50	143.mg	42/50		
D c54819	n.s.s.	n.s.s.	0/50	70.7mg	0/50	143.mg	0/50		
112 c54819	7.93mg	30.9mg	40/50	70.7mg	41/50	143.mg	6/50		

Spe	Strain	Site	Xpo+Xpt	TD50	2Tailpvl	
Sex	Route	Hist	Notes	DR	AuOp	
a	R m	f34 gav	MXB MXB 22m24 a	17.5mg	/ P<.0005	
b	R m	f34 gav	nas MXA 22m24 a	29.7mg	/ P<.0005c	
c	R m	f34 gav	for MXA 22m24 a	41.6mg	* P<.0005c	
d	R m	f34 gav	nas MXA 22m24 a	52.1mg	/ P<.0005c	
e	R m	f34 gav	nas can 22m24 a	63.4mg	/ P<.0005c	
f	R m	f34 gav	for sqc 22m24 a	67.1mg	* P<.0005c	
g	R m	f34 gav	nas acn 22m24 a	70.1mg	/ P<.0005	
h	R m	f34 gav	eso MXA 22m24 a	81.6mg	/ P<.0005c	
i	R m	f34 gav	mul mml 22m24 a	128. mg	* P<.006	
j	R m	f34 gav	for sqc 22m24 a	135. mg	* P<.0005c	
k	R m	f34 gav	eso sqc 22m24 a	143. mg	* P<.0005c	
l	R m	f34 gav	MXA MXA 22m24 a	163. mg	* P<.0005c	
m	R m	f34 gav	MXA MXA 22m24 a	178. mg	* P<.0005c	
n	R m	f34 gav	eso sqc 22m24 a	218. mg	* P<.002 c	
o	R m	f34 gav	nas sqc 22m24 a	297. mg	* P<.009 c	
p	R m	f34 gav	ton MXA 22m24 a	415. mg	* P<.002 c	
q	R m	f34 gav	ton sqc 22m24 a	469. mg	* P<.005 c	
r	R m	f34 gav	MXA MXA 22m24 a	86.7mg	/ P<.02	
s	R m	f34 gav	TBA MXB 22m24 a	10.2mg	/ P<.0005	
t	R m	f34 gav	liv MXB 22m24 a	1.03gm	/ P<.3	
DIPYRONE***			100ng.....1ug.....10.....100.....1mg.....10.....100.....1g.....10			
113	R f	wis eat	mgl ade 24m30 e	+	328. mg \ P<.004 -	
a	R f	wis eat	liv lcc 24m30 e	8.33gm	* P<.3 -	
b	R f	wis eat	liv ade 24m30 e	33.1gm	* P=1. -	
c	R f	wis eat	liv ang 24m30 e	41.4gm	* P<.9 -	
114	R m	wis eat	liv ade 24m30 e	>	3.34gm * P<.4 -	
a	R m	wis eat	liv apc 24m30 e	no dre	P=1. -	
EPICHLOROHYDRIN***			100ng.....1ug.....10.....100.....1mg.....10.....100.....1g.....10			
115	R f	wis gav	for sqc 24m24 e	- + .	2.55mg / P<.0005+	
a	R f	wis gav	liv nnd 24m24 e	no dre	P=1. -	
b	R f	wis gav	tba mix 24m24 e	no dre	P=1.	
116	R m	wis gav	for sqc 24m24 e	- + .	3.53mg * P<.0005+	
a	R m	wis gav	liv tum 24m24 e	218. mg	P<.3 -	
b	R m	wis gav	liv hpc 24m24 e	no dre	P=1. -	
c	R m	wis gav	liv nnd 24m24 e	no dre	P=1. -	
d	R m	wis gav	tba mix 24m24 e	4.83mg	P<.4	
DL-ETHIONINE***			100ng.....1ug.....10.....100.....1mg.....10.....100.....1g.....10			
117	M f	bal eat	liv mix 24m24 e	- + .	59.7mg * P<.0005+	
a	M f	bal eat	liv hpc 24m24 e	112. mg	* P<.0005+	
b	M f	bal eat	lun adc 24m24 e	no dre	P=1.	
c	M f	bal eat	lun ade 24m24 e	no dre	P=1.	
118	M m	bal eat	lun adc 24m24 e	- + .	222. mg \ P<.04	
a	M m	bal eat	liv mix 24m24 e	791. mg	* P<.02 +	
b	M m	bal eat	liv hpc 24m24 e	1.54gm	* P<.02 +	
c	M m	bal eat	lun ade 24m24 e	no dre	P=1.	
119	M f	cen gav	liv mix 7m24	- ±	33.8mg \ P<.05 +	
120	M f	cen eat	liv mix 68w68 esv	- + .	62.5mg * P<.0005+	
a	M f	cen eat	liv hpc 68w68 esv	128. mg	* P<.0005+	
b	M f	cen eat	lun ade 68w68 esv	1.13gm	* P<.06	
121	M m	cen eat	liv hpc 68w68 e	- + .	182. mg	P<.003 +
a	M m	cen eat	liv mix 68w68 e	181. mg	* P<.08 +	
b	M m	cen eat	lun ade 68w68 e	no dre	P=1.	
122	M f	scd eat	liv mix 24m24 esv	- + .	67.3mg \ P<.0005+	
a	M f	scd eat	liv hpc 24m24 esv	151. mg	* P<.0005+	
b	M f	scd eat	lun adc 24m24 esv	no dre	P=1.	
c	M f	scd eat	lun ade 24m24 esv	no dre	P=1.	
123	R m	f3d eat	liv hpc 24m24 e	- + .	46.0mg Z P<.0005+	
a	R m	f3d eat	liv thc 24m24 e	46.0mg Z P<.0005+		
b	R m	f3d eat	liv ghc 24m24 e	no dre	P=1.	
c	R m	f3d eat	liv clc 24m24 e	no dre	P=1.	
O-ETHOXYBENZAMIDE			100ng.....1ug.....10.....100.....1mg.....10.....100.....1g.....10			
124	M f	b6c eat	liv mix 22m23 er	>	3.31gm * P<.4	
125	M m	b6c eat	liv mix 22m23 er	- + .	513. mg * P<.005 +	
ETHYL ACRYLATE			100ng.....1ug.....10.....100.....1mg.....10.....100.....1g.....10			
126	M f	b6c gav	for MXA 24m24	: ±	430. mg * P<.03 c	
a	M f	b6c gav	TBA MXB 24m24	no dre	P=1.	
b	M f	b6c gav	liv MXB 24m24	26.3gm	* P<1.	
c	M f	b6c gav	lun MXB 24m24	2.81gm	* P<.6	
127	M f	b6c inh	nac tum 24m24 r	>	no dre P=1. -	

	RefNum	LoConf	UpConf	Cntrl	1Dose	1Inc	2Dose	2Inc	Citation or Pathology	Brkly Code
a	c54819	10.8mg	28.5mg	0/50	70.7mg	33/50	143.mg	29/50	eso:sqc,sqp; for:sqc,sqp; lpp:sqc; nas:adc,can,sqc; pal:sqc,sqp; ton:sqc,sqp. C	
b	c54819	18.2mg	47.1mg	0/50	70.7mg	23/50	143.mg	28/50	nas:adc,can,sqc.	
c	c54819	19.8mg	98.0mg	0/50	70.7mg	14/50	143.mg	0/50	for:sqc,sqp.	
d	c54819	32.0mg	84.8mg	0/50	70.7mg	15/50	143.mg	24/50	nas:can,sqc.	
e	c54819	38.2mg	101.mg	0/50	70.7mg	12/50	143.mg	24/50		
f	c54819	26.7mg	230.mg	0/50	70.7mg	7/50	143.mg	0/50		
g	c54819	29.7mg	185.mg	0/50	70.7mg	8/50	143.mg	4/50		S
h	c54819	32.0mg	249.mg	0/50	70.7mg	6/50	143.mg	4/50	eso:sqc,sqp.	
i	c54819	44.2mg	2.22gm	3/50	70.7mg	6/50	143.mg	1/50		S
j	c54819	50.3mg	463.mg	0/50	70.7mg	7/50	143.mg	0/50		
k	c54819	44.3mg	770.mg	0/50	70.7mg	4/50	143.mg	1/50		
l	c54819	56.5mg	511.mg	0/50	70.7mg	5/50	143.mg	4/50	lpp:sqc; pal:sqc,sqp; ton:sqc,sqp.	
m	c54819	58.0mg	708.mg	0/50	70.7mg	5/50	143.mg	2/50	lpp:sqc; pal:sqc; ton:sqc.	
n	c54819	59.8mg	1.31gm	0/50	70.7mg	2/50	143.mg	3/50		
o	c54819	87.7mg	13.1gm	0/50	70.7mg	3/50	143.mg	0/50		
p	c54819	157.mg	2.06gm	0/50	70.7mg	3/50	143.mg	3/50	ton:sqc,sqp.	
q	c54819	165.mg	4.25gm	0/50	70.7mg	3/50	143.mg	2/50		
r	c54819	29.2mg	n.s.s.	13/50	70.7mg	7/50	143.mg	3/50	adr:phm; amd:phe. S	
s	c54819	6.56mg	17.2mg	40/50	70.7mg	48/50	143.mg	37/50		
t	c54819	107.mg	n.s.s.	1/50	70.7mg	0/50	143.mg	1/50	liv:hpa,hpc,nnd.	
DIPYRONE*** (sulpyrin) 68-89-3										
113	1673	134.mg	2.04gm	0/49	40.0mg	6/49	(120.mg)	2/49	Donaubauer;txap,81,443-451;1985	
a	1673	1.36gm	n.s.s.	0/49	40.0mg	0/49	120.mg	1/49		
b	1673	1.07gm	n.s.s.	2/49	40.0mg	1/49	120.mg	2/49		
c	1673	1.51gm	n.s.s.	1/49	40.0mg	0/49	120.mg	1/49		
114	1673	822.mg	n.s.s.	0/47	32.0mg	1/50	96.0mg	1/49		
a	1673	384.mg	n.s.s.	1/47	32.0mg	0/50	96.0mg	0/49		
EPICHLOROHYDRIN*** 106-89-8										
115	1727	1.46mg	4.71mg	0/38	1.43mg	2/27	7.14mg	24/24	Wester;txcy,36,325-339;1985	
a	1727	72.1mg	n.s.s.	1/50	7.14mg	0/49				
b	1727	10.3mg	n.s.s.	33/50	7.14mg	28/49				
116	1727	2.34mg	5.56mg	0/49	1.43mg	6/43	7.14mg	35/43		
a	1727	35.5mg	n.s.s.	0/49	7.14mg	1/45				
b	1727	66.2mg	n.s.s.	1/49	7.14mg	0/45				
c	1727	66.2mg	n.s.s.	1/49	7.14mg	0/45				
d	1727	.898mg	n.s.s.	46/49	7.14mg	44/45				
DL-ETHIONINE*** 67-21-0										
117	1782n	36.2mg	106.mg	0/30	65.0mg	14/29	130.mg	12/14	Hoover;carc,7,1143-1148;1986	
a	1782n	62.6mg	227.mg	0/30	65.0mg	7/29	130.mg	10/14		
b	1782n	342.mg	n.s.s.	7/30	65.0mg	5/29	130.mg	1/14		
c	1782n	318.mg	n.s.s.	6/30	65.0mg	1/29	130.mg	3/14		
118	1782n	88.4mg	n.s.s.	4/24	120.mg	12/28	(300.mg)	1/23		
a	1782n	306.mg	n.s.s.	1/26	120.mg	2/24	300.mg	5/16		
b	1782n	584.mg	n.s.s.	0/26	120.mg	1/30	300.mg	4/27		
c	1782n	1.20gm	n.s.s.	2/24	120.mg	1/28	300.mg	1/23		
119	1782	13.5mg	n.s.s.	12/41	18.7mg	20/39	(62.4mg)	7/37		
120	1782n	36.4mg	127.mg	1/26	130.mg	12/24	308.mg	12/16		
a	1782n	66.5mg	377.mg	1/26	130.mg	6/24	308.mg	9/16		
b	1782n	278.mg	n.s.s.	0/26	130.mg	0/24	308.mg	2/16		
121	1782n	79.6mg	1.38gm	9/56	300.mg	13/27				
a	1782n	69.7mg	n.s.s.	8/26	120.mg	16/30	300.mg	15/27		
b	1782n	573.mg	n.s.s.	0/26	120.mg	1/30	300.mg	0/27		
122	1782n	37.6mg	132.mg	0/29	130.mg	20/27	(313.mg)	16/25		
a	1782n	97.3mg	251.mg	0/29	130.mg	18/27	313.mg	15/25		
b	1782n	328.mg	n.s.s.	13/29	130.mg	6/27	(313.mg)	4/25		
c	1782n	1.87gm	n.s.s.	2/29	130.mg	1/27	313.mg	0/25		
123	1756	27.2mg	83.0mg	0/30	4.00mg	0/29	20.0mg	0/27	Ogiso;txpy,13,257-265;1985	
a	1756	27.2mg	83.0mg	0/30	4.00mg	0/29	20.0mg	0/27		
b	1756	19.0mg	n.s.s.	0/30	4.00mg	0/29	20.0mg	0/27		
c	1756	19.0mg	n.s.s.	0/30	4.00mg	0/29	20.0mg	0/27		
o-ETHOXYSBENZAMIDE (ethenazamide) 938-73-8										
124	1797	787.mg	n.s.s.	5/19	499.mg	9/18	1.50gm	7/16	Naito;jnci,76,115-118;1986	
125	1797	226.mg	5.10gm	5/10	461.mg	8/15	1.38gm	17/18		
ETHYL ACRYLATE 140-88-5										
126	c50384	193.mg	n.s.s.	1/50	70.4mg	5/50	142.mg	7/50	for:sqc,sqp.	
a	c50384	134.mg	n.s.s.	32/50	70.4mg	31/50	142.mg	28/50		
b	c50384	392.mg	n.s.s.	3/50	70.4mg	3/50	142.mg	3/50	liv:hpa,hpc,nnd.	
c	c50384	420.mg	n.s.s.	2/50	70.4mg	2/50	142.mg	3/50	lun:a/a,a/c.	
127	1754i	119.mg	n.s.s.	0/80	6.44mg	0/90			Miller;dact,8,1-42;1985	

Spa	Strain	Site	Xpo+Xpt	TD50	2Tailpvl
Sex	Route	Hist	Notes	DR	AuOp
128	M f b6c	inh lab	a/2 6m27 er	.>	4.19gm P<.8 -
a	M f b6c	inh liv	a/2 6m27 er	no dre	P=1. -
b	M f b6c	inh tba	ben 6m27 er	no dre	P=1. -
c	M f b6c	inh tba	mal 6m27 er	no dre	P=1. -
d	M f b6c	inh tba	mix 6m27 er	no dre	P=1. -
129	M f b6c	inh lab	h/2 27m27 e	.>	1.26gm * P<.2 -
a	M f b6c	inh liv	a/2 27m27 e	no dre	P=1. -
b	M f b6c	inh liv	h/2 27m27 e	no dre	P=1. -
c	M f b6c	inh tba	mix 27m27 e	11.7gm * P<1. -	
d	M f b6c	inh tba	mal 27m27 e	no dre	P=1. -
e	M f b6c	inh tba	ben 27m27 e	no dre	P=1. -
130	M m b6c	gav	for MXA 24m24	: + :	260.mg * P<.0005c
a	M m b6c	gav	for sqp 24m24		339.mg * P<.002 c
b	M m b6c	gav	for sqc 24m24		687.mg * P<.01 c
c	M m b6c	gav	TBA MXB 24m24	no dre	P=1. -
d	M m b6c	gav	liv MXB 24m24	no dre	P=1. -
e	M m b6c	gav	lun MXB 24m24	no dre	P=1. -
131	M m b6c	inh nac	tum 24m24 r	.>	no dre P=1. -
132	M m b6c	inh thy	ade 6m27 er	- +	515.mg P<.01 -
a	M m b6c	inh liv	a/2 6m27 er	no dre	P=1. -
b	M m b6c	inh lab	a/2 6m27 er	no dre	P=1. -
c	M m b6c	inh tba	ben 6m27 er	no dre	P=1. -
d	M m b6c	inh tba	mal 6m27 er	no dre	P=1. -
e	M m b6c	inh tba	mix 6m27 er	no dre	P=1. -
133	M m b6c	inh lab	a/2 27m27 e	.>	no dre P=1. -
a	M m b6c	inh liv	a/2 27m27 e	no dre	P=1. -
b	M m b6c	inh liv	h/2 27m27 e	no dre	P=1. -
c	M m b6c	inh tba	mix 27m27 e	2.17gm * P<.9 -	
d	M m b6c	inh tba	mal 27m27 e	300.mg * P<.2 -	
e	M m b6c	inh tba	ben 27m27 e	no dre	P=1. -
134	R f f34	gav	for MXA 24m24	: + :	362.mg * P<.004 c
a	R f f34	gav	for sqp 24m24		420.mg * P<.01 c
b	R f f34	gav	TBA MXB 24m24		534.mg * P<.7
c	R f f34	gav	liv MXB 24m24		4.66gm * P<.3
135	R f f34	inh nac	tum 24m24 r	.>	no dre P=1. -
136	R f f34	inh liv	bht 6m27 er	.>	no dre P=1. -
a	R f f34	inh liv	sar 6m27 er	no dre	P=1. -
b	R f f34	inh tyf	a/2 6m27 er	no dre	P=1. -
c	R f f34	inh tba	mix 6m27 er	no dre	P=1. -
d	R f f34	inh tba	ben 6m27 er	no dre	P=1. -
e	R f f34	inh tba	mal 6m27 er	no dre	P=1. -
137	R f f34	inh tyf	a/2 27m27 e	.>	1.03gm * P<.2 -
a	R f f34	inh liv	sar 27m27 e	no dre	P=1. -
b	R f f34	inh liv	bht 27m27 e	no dre	P=1. -
c	R f f34	inh tba	ben 27m27 e	no dre	P=1. -
d	R f f34	inh tba	mal 27m27 e	no dre	P=1. -
e	R f f34	inh tba	mix 27m27 e	no dre	P=1. -
138	R m f34	gav	for MXA 24m24	: + :	71.9mg * P<.0005c
a	R m f34	gav	for sqp 24m24		92.9mg * P<.0005c
b	R m f34	gav	for sqc 24m24		234.mg * P<.0005c
c	R m f34	gav	mul mle 24m24		330.mg \ P<.03
d	R m f34	gav	pan MXA 24m24		402.mg \ P<.02
e	R m f34	gav	TBA MXB 24m24		94.8mg * P<.01
f	R m f34	gav	liv MXB 24m24		3.29gm * P<.2
139	R m f34	inh nac	tum 24m24 r	.>	no dre P=1. -
140	R m f34	inh tyf	a/2 6m27 er	.>	267.mg P<.2 -
a	R m f34	inh liv	hpc 6m27 er	no dre	P=1. -
b	R m f34	inh liv	bht 6m27 er	no dre	P=1. -
c	R m f34	inh tba	ben 6m27 er	12.8mg	P<.4 -
d	R m f34	inh tba	mal 6m27 er	no dre	P=1. -
e	R m f34	inh tba	mix 6m27 er	noTD50	P<.4 -
141	R m f34	inh tyf	a/2 27m27 e	.+ .	77.9mg \ P<.03 -
a	R m f34	inh liv	bht 27m27 e	599.mg * P<.6 -	
b	R m f34	inh liv	hpc 27m27 e	1.67gm * P<.6 -	
c	R m f34	inh tba	mix 27m27 e	5.76mg * P<.08 -	
d	R m f34	inh tba	ben 27m27 e	6.27mg * P<.03 -	
e	R m f34	inh tba	mal 27m27 e	39.0mg * P<.04 -	
ETHYL ALCOHOL***					
100ng...:..1ug....:..10.....:..100.....:..1mg.....:..10.....:..100.....:..1g.....:..10					
142	R m wis	wat	for sqc 91w91 r	.>	no dre P=1. -
Z-ETHYL-O,N,N-AZOOXYETHANE					
100ng...:..1ug....:..10.....:..100.....:..1mg.....:..10.....:..100.....:..1g.....:..10					
143	R m f34	wat	liv mix 30w55	<+	noTD50 P<.0005+
a	R m f34	wat	nes mix 30w55		22.0ug P<.0005+
b	R m f34	wat	eso mix 30w55		30.2ug P<.0005+

RefNum	LoConf	UpConf	Cntrl	1Dose	1Inc	2Dose	2Inc	Citation or Pathology	Brkly Code
128	1754j	403.mg n.s.s.	6/125	64.4mg	4/66				
a	1754j	312.mg n.s.s.	27/125	64.4mg	12/66				
b	1754j	155.mg n.s.s.	73/125	64.4mg	35/66				
c	1754j	199.mg n.s.s.	90/125	64.4mg	38/66				
d	1754j	93.0mg n.s.s.	109/125	64.4mg	53/66				
129	1754k	405.mg n.s.s.	6/125	32.2mg	7/78	96.5mg	8/76		
a	1754k	614.mg n.s.s.	27/125	32.2mg	9/78	96.5mg	13/76		
b	1754k	2.20gm n.s.s.	4/125	32.2mg	1/78	96.5mg	0/76		
c	1754k	89.5mg n.s.s.	109/125	32.2mg	61/78	96.5mg	66/76		
d	1754k	182.mg n.s.s.	90/125	32.2mg	43/78	96.5mg	52/76		
e	1754k	308.mg n.s.s.	73/125	32.2mg	38/78	96.5mg	38/76		
130	c50384	147.mg 523.mg	0/50	70.4mg	5/50	142.mg	12/50	for:sqc,sqp.	
a	c50384	178.mg 1.04gm	0/50	70.4mg	4/50	142.mg	9/50		
b	c50384	296.mg 48.3gm	0/50	70.4mg	2/50	142.mg	5/50		
c	c50384	134.mg n.s.s.	30/50	70.4mg	32/50	142.mg	29/50		
d	c50384	189.mg n.s.s.	17/50	70.4mg	12/50	(142.mg	6/50)		
e	c50384	428.mg n.s.s.	8/50	70.4mg	6/50	142.mg	5/50		
131	1754i	99.5mg n.s.s.	0/80	5.36mg	0/90				
132	1754j	199.mg 53.5gm	2/121	53.6mg	7/69				
a	1754j	254.mg n.s.s.	44/121	53.6mg	19/69				
b	1754j	302.mg n.s.s.	28/121	53.6mg	12/69				
c	1754j	208.mg n.s.s.	60/121	53.6mg	27/69				
d	1754j	160.mg n.s.s.	62/121	53.6mg	31/69				
e	1754j	132.mg n.s.s.	90/121	53.6mg	44/69				
133	1754k	215.mg n.s.s.	28/121	26.8mg	10/75	(80.4mg	9/76)		
a	1754k	351.mg n.s.s.	44/121	26.8mg	22/75	80.4mg	23/76		
b	1754k	1.17gm n.s.s.	5/121	26.8mg	3/75	80.4mg	1/76		
c	1754k	100.mg n.s.s.	90/121	26.8mg	53/75	80.4mg	57/76		
d	1754k	104.mg n.s.s.	62/121	26.8mg	34/75	80.4mg	47/76		
e	1754k	466.mg n.s.s.	60/121	26.8mg	30/75	80.4mg	25/76		
134	c50384	188.mg 2.29gm	1/50	70.1mg	6/50	141.mg	11/50	for:sqc,sqp.	
a	c50384	205.mg 37.9gm	1/50	70.1mg	6/50	141.mg	9/50		
b	c50384	81.4mg n.s.s.	38/50	70.1mg	44/50	141.mg	44/50		
c	c50384	760.mg n.s.s.	0/50	70.1mg	0/50	141.mg	1/50		
135	1754m	28.4mg n.s.s.	0/80	1.53mg	0/90				
136	1754n	199.mg n.s.s.	4/121	15.3mg	1/70				
a	1754n	280.mg n.s.s.	1/121	15.3mg	0/70				
b	1754n	280.mg n.s.s.	0/121	15.3mg	0/70				
c	1754n	11.5mg n.s.s.	114/121	15.3mg	64/70				
d	1754n	20.3mg n.s.s.	97/121	15.3mg	54/70				
e	1754n	59.0mg n.s.s.	72/121	15.3mg	32/70				
137	1754o	253.mg n.s.s.	0/121	7.66mg	1/77	23.0mg	1/78		
a	1754o	116.mg n.s.s.	1/121	7.66mg	0/77	23.0mg	0/78		
b	1754o	299.mg n.s.s.	4/121	7.66mg	1/77	23.0mg	2/78		
c	1754o	48.7mg n.s.s.	97/121	7.66mg	51/77	23.0mg	56/78		
d	1754o	81.1mg n.s.s.	72/121	7.66mg	41/77	23.0mg	38/78		
e	1754o	13.7mg n.s.s.	114/121	7.66mg	71/77	23.0mg	73/78		
138	c50384	50.0mg 111.mg	1/50	70.1mg	18/50	141.mg	36/50	for:sqc,sqp.	
a	c50384	62.2mg 152.mg	1/50	70.1mg	15/50	141.mg	29/50		
b	c50384	130.mg 488.mg	0/50	70.1mg	5/50	141.mg	12/50		
c	c50384	120.mg n.s.s.	1/50	70.1mg	6/50	(141.mg	1/50)		S
d	c50384	138.mg n.s.s.	0/50	70.1mg	4/50	(141.mg	0/50)		pan:acc,ana. S
e	c50384	45.7mg 9.25gm	38/50	70.1mg	40/50	141.mg	45/50		
f	c50384	535.mg n.s.s.	0/50	70.1mg	0/50	141.mg	1/50		
139	1754m	19.9mg n.s.s.	0/80	1.07mg	0/90				
140	1754n	68.6mg n.s.s.	1/120	10.7mg	3/71				
a	1754n	199.mg n.s.s.	2/120	10.7mg	0/71				
b	1754n	199.mg n.s.s.	7/120	10.7mg	0/71				
c	1754n	2.72mg n.s.s.	113/120	10.7mg	69/71				
d	1754n	28.0mg n.s.s.	60/120	10.7mg	33/71				
e	1754n	n.s.s. n.s.s.	116/120	10.7mg	71/71				
141	1754o	27.0mg n.s.s.	1/120	5.36mg	5/76	(16.1mg	2/75)		
a	1754o	94.8mg n.s.s.	7/120	5.36mg	5/76	16.1mg	6/75		
b	1754o	194.mg n.s.s.	2/120	5.36mg	0/76	16.1mg	2/75		
c	1754o	1.43mg n.s.s.	116/120	5.36mg	74/76	16.1mg	75/75		
d	1754o	2.09mg n.s.s.	113/120	5.36mg	72/76	16.1mg	75/75		
e	1754o	16.5mg n.s.s.	60/120	5.36mg	40/76	16.1mg	49/75		
ETHYL ALCOHOL*** 64-17-5									
142	1800	3.94gm n.s.s.	0/10	2.50gm	0/10			Salmon;carc,7,1447-1450;1986	
Z-ETHYL-O,N,N-AZOXYETHANE 16301-26-1									
143	1723	n.s.s. 23.8ug	2/20	.218mg	20/20			Lijinsky;canr,45,76-79;1985	
a	1723	11.0ug 47.7ug	0/20	.218mg	17/20				
b	1723	15.4ug 66.5ug	0/20	.218mg	15/20				

Spec Strain Site Xpo+Xpt		T050	ZTailpvl
Sex Route Hist Notes		DR	AuOp
c R m f34 wat liv hes 30w55		34.7ug	P<.0005+
d R m f34 wat liv hpc 30w55		34.7ug	P<.0005+
e R m f34 wat liv nsc 30w55		97.1ug	P<.002
f R m f34 wat liv nnd 30w55		no dre	P=1.
Z-ETHYL-O,N,N-AZOXYMETHANE	100ng....1ug.....10.....100.....1mg.....10.....100.....1g.....10		
144 R m f34 wat liv mix 30w55	<+	noTD50	P<.0005+
a R m f34 wat liv hpc 30w55		18.9ug	P<.0005+
b R m f34 wat liv hes 30w55		39.1ug	P<.0005+
c R m f34 wat liv nsc 30w55		83.2ug	P<.002
d R m f34 wat col a/2 30w55		.125mg	P<.007 +
e R m f34 wat ilm tum 30w55		.221mg	P<.04 +
f R m f34 wat liv nnd 30w55		no dre	P=1.
ETHYL BENZENE	100ng....1ug.....10.....100.....1mg.....10.....100.....1g.....10		
145 R f sda gav tba mal 24m33 e		.	P<.08 +
146 R m sda gav tba mal 24m33 e	.>	1.21gm	P<.3 +
1.98gm			
FORMALDEHYDE***	100ng....1ug.....10.....100.....1mg.....10.....100.....1g.....10		
147 R m sda inh nac sqc 28m28 e	.	1.82mg	P<.0005+
a R m sda inh nac car 28m28 e	+	86.4mg	P<.3 +
b R m sda inh nac fbs 28m28 e		86.4mg	P<.3 +
c R m sda inh liv hpc 28m28 e		no dre	P=1.
GEMCADIOL	100ng....1ug.....10.....100.....1mg.....10.....100.....1g.....10		
148 R f cdr eat liv hpa 52w52 k	.>	no dre	P=1.
149 R m cdr eat liv hpa 52w52 k	.>	no dre	P=1.
GENTIAN VIOLET	100ng....1ug.....10.....100.....1mg.....10.....100.....1g.....10		
150 M f b6c eat liv tum 52w52	.>	no dre	P=1. -
151 M f b6c eat liv hpa 78w78 e	.	115.mg *	P<.003 +
a M f b6c eat liv hpc 78w78 e	+	343.mg *	P<.07 +
152 M f b6c eat liv hpc 25m25 e	.	57.9mg Z	P<.0005+
a M f b6c eat liv hpa 25m25 e	.	75.5mg Z	P<.0005+
b M f b6c eat hag ade 25m25 e		305.mg *	P<.0005+
c M f b6c eat ute rta 25m25 e		413.mg *	P<.0005+
d M f b6c eat vag rta 25m25 e		668.mg *	P<.0005+
e M f b6c eat ubl rta 25m25 e		834.mg *	P<.002 +
f M f b6c eat ova rta 25m25 e		912.mg *	P<.0005+
153 M m b6c eat liv hpa 52w52	.>	no dre	P=1. -
154 M m b6c eat liv hpa 78w78 e	.>	636.mg *	P<.5 -
a M m b6c eat liv hpc 78w78 e		no dre	P=1. -
155 M m b6c eat liv hpa 25m25 e	.	139.mg *	P<.0005+
a M m b6c eat liv hpc 25m25 e	+	222.mg *	P<.0005+
b M m b6c eat hag ade 25m25 e		615.mg *	P<.03 +
GLYCERYRRHIZINATE, DISODIUM	100ng....1ug.....10.....100.....1mg.....10.....100.....1g.....10		
156 M f b6c wat lun ade 22m26 e	.>	14.4gm *	P<.2 -
a M f b6c wat liv hpa 22m26 e		28.9gm *	P<.2 -
b M f b6c wat liv hpc 22m26 e		29.0gm *	P<.6 -
c M f b6c wat lun adc 22m26 e		no dre	P=1. -
d M f b6c wat liv hem 22m26 e		no dre	P=1. -
e M f b6c wat tba mix 22m26 e		no dre	P=1. -
157 M m b6c wat liv hem 22m26 e	.>	no dre	P=1. -
a M m b6c wat liv hpc 22m26 e		no dre	P=1. -
b M m b6c wat liv hpa 22m26 e		no dre	P=1. -
c M m b6c wat lun ade 22m26 e		no dre	P=1. -
d M m b6c wat lun adc 22m26 e		no dre	P=1. -
e M m b6c wat tba mix 22m26 e		3.17gm *	P<.8 -
HEXAChLOROBENZENE***	100ng....1ug.....10.....100.....1mg.....10.....100.....1g.....10		
158 R f f34 eat liv mix 90w90 r	.	4.67mg	P<.0005+
a R f f34 eat liv hpc 90w90 r	+	12.7mg	P<.006 +
b R f f34 eat liv nnd 90w90 r		12.7mg	P<.006 +
159 R m f34 eat liv mix 90w90 r	.	28.7mg	P<.09 +
HUMIC ACIDS, COMMERCIAL GRADE	100ng....1ug.....10.....100.....1mg.....10.....100.....1g.....10		
160 M f b6c wat liv hem 24m24 e	.>	1.24gm	P<.2
a M f b6c wat liv hnd 24m24 e		3.19gm	P<.5
b M f b6c wat lun ptm 24m24 e		5.65gm	P<.9
c M f b6c wat tba mix 24m24 e		169.mg	P<.5
161 M m b6c wat lun ptm 24m24 e	.>	348.mg	P<.2
a M m b6c wat liv hpt 24m24 e		2.64gm	P<.8
b M m b6c wat tba mix 24m24 e		153.mg	P<.3

RefNum	LoConf	UpConf	Cntrl	1Dose	1Inc	2Dose	2Inc	Citation or Pathology	Brkly Code
c	1723	17.7ug	78.1ug	0/20	.218mg	14/20			
d	1723	17.7ug	78.1ug	0/20	.218mg	14/20			
e	1723	41.5ug	.368mg	0/20	.218mg	7/20			
f	1723	.252mg	n.s.s.	2/20	.218mg	0/20			
Z-ETHYL-O,N,N-AZOXYMETHANE		57497-29-7							
144	1723	n.s.s.	20.4ug	2/20	.187mg	20/20		Lijinsky;canr,45,76-79;1985	
a	1723	9.44ug	40.9ug	0/20	.187mg	17/20			
b	1723	19.5ug	93.3ug	0/20	.187mg	12/20			
c	1723	35.6ug	.315mg	0/20	.187mg	7/20			
d	1723	47.0ug	1.44mg	0/20	.187mg	5/20			
e	1723	66.6ug	n.s.s.	0/20	.187mg	3/20			
f	1723	.216mg	n.s.s.	2/20	.187mg	0/20			
ETHYL BENZENE		100-41-4							
145	bt905	433.mg	n.s.s.	10/49	237.mg	14/37		Maltoni;ajim,7,415-446;1985	
146	bt905	528.mg	n.s.s.	11/45	237.mg	14/40			
FORMALDEHYDE***		50-00-0						Sellakumar;txap,81,401-406;1985	
147	1674	1.22mg	2.86mg	0/99	.952mg	38/100			
a	1674	14.1mg	n.s.s.	0/99	.952mg	1/100			
b	1674	14.1mg	n.s.s.	0/99	.952mg	1/100			
c	1674	16.0mg	n.s.s.	1/99	.952mg	1/100			
GEMCADIOL (2,2,9,9-tetramethyl-1,10-decanediol)		35449-36-6						Fitzgerald;faat,6,520-531;1986	
148	1768	186.mg	n.s.s.	0/10	30.0mg	1/10	150.mg	0/10	300.mg
149	1768	185.mg	n.s.s.	0/10	30.0mg	2/10	150.mg	0/10	300.mg
0/10									
GENTIAN VIOLET		548-62-9							
150	1680m	10.7mg	n.s.s.	0/48	13.0mg	0/24	39.0mg	0/24	78.0mg
151	1680n	51.5mg	734.mg	3/47	13.0mg	0/22	39.0mg	3/24	78.0mg
a	1680n	103.mg	n.s.s.	1/47	13.0mg	0/22	39.0mg	1/24	78.0mg
152	1680o	44.7mg	77.0mg	7/185	13.0mg	5/93	39.0mg	30/93	78.0mg
a	1680o	49.8mg	128.mg	8/185	13.0mg	8/93	39.0mg	36/93	(78.0mg 20/95)
b	1680o	166.mg	1.13gm	8/186	13.0mg	11/93	39.0mg	18/89	78.0mg
c	1680o	244.mg	786.mg	0/188	13.0mg	2/95	39.0mg	6/90	78.0mg
d	1680o	335.mg	2.14gm	1/182	13.0mg	1/90	39.0mg	4/88	78.0mg
e	1680o	407.mg	3.57gm	0/188	13.0mg	2/92	39.0mg	3/89	78.0mg
f	1680o	430.mg	3.27gm	0/178	13.0mg	1/90	39.0mg	3/89	78.0mg
153	1680o	79.4mg	n.s.s.	0/48	12.0mg	2/24	36.0mg	0/24	72.0mg
154	1680o	106.mg	n.s.s.	3/48	12.0mg	0/24	36.0mg	2/24	72.0mg
a	1680n	119.mg	n.s.s.	5/48	12.0mg	1/24	36.0mg	2/24	72.0mg
155	1680o	90.3mg	260.mg	17/183	12.0mg	14/92	36.0mg	20/93	72.0mg
a	1680o	123.mg	742.mg	27/183	12.0mg	15/92	36.0mg	17/93	72.0mg
b	1680o	255.mg	n.s.s.	7/187	12.0mg	7/92	36.0mg	10/94	72.0mg
								9/89	
GLYCYRRHIZINATE, DISODIUM		71277-79-7						Kobuke;fctx,23,979-983;1985	
156	1685	3.54mg	n.s.s.	0/44	140.mg	0/47	262.mg	1/46	524.mg
a	1685	4.71mg	n.s.s.	0/44	140.mg	0/47	262.mg	0/46	524.mg
b	1685	4.73mg	n.s.s.	0/44	140.mg	0/47	262.mg	1/46	524.mg
c	1685	3.72mg	n.s.s.	0/44	140.mg	1/47	262.mg	1/46	524.mg
d	1685	5.96mg	n.s.s.	1/44	140.mg	0/47	262.mg	1/46	524.mg
e	1685	1.33mg	n.s.s.	12/44	140.mg	12/47	262.mg	11/46	524.mg
157	1685	1.22mg	n.s.s.	3/37	58.2mg	0/38	116.mg	3/37	218.mg
a	1685	1.23mg	n.s.s.	5/37	58.2mg	0/38	116.mg	3/37	218.mg
b	1685	1.41mg	n.s.s.	4/37	58.2mg	3/38	116.mg	2/37	218.mg
c	1685	1.53mg	n.s.s.	0/37	58.2mg	1/38	116.mg	1/37	218.mg
d	1685	1.88mg	n.s.s.	2/37	58.2mg	0/38	116.mg	1/37	218.mg
e	1685	377.mg	n.s.s.	14/37	58.2mg	7/38	116.mg	14/37	218.mg
								14/40	
HEXACHLOROBENZENE*** (HCB)		118-74-1							
158	1708	2.16mg	12.4mg	0/15	10.0mg	10/15		Smith;carc,6,631-636;1985	
a	1708	4.75mg	120.mg	0/15	10.0mg	5/15			
b	1708	4.75mg	120.mg	0/15	10.0mg	5/15			
159	1708	7.04mg	n.s.s.	0/15	8.00mg	2/15			
HUMIC ACIDS, COMMERCIAL GRADE		1415-93-6							
160	1806	305.mg	n.s.s.	3/96	100.mg	4/48			
a	1806	442.mg	n.s.s.	2/96	100.mg	2/48			
b	1806	289.mg	n.s.s.	13/96	100.mg	7/48			
c	1806	32.4mg	n.s.s.	84/96	100.mg	44/48			
161	1806	113.mg	n.s.s.	22/99	83.3mg	17/50			
a	1806	242.mg	n.s.s.	12/99	83.3mg	7/50			
b	1806	38.8mg	n.s.s.	76/99	83.3mg	42/50			

RefNum	LoConf	UpConf	Cntrl	1Dose	1Inc	2Dose	2Inc		Citation or Pathology	Brkly Code
HYDRAZINE*** 302-01-2										
162	1679n	2.32mg 8.95mg	1/200	20.6ug	0/200	82.4ug	1/200	.412mg	16/200	Vernot;faat,5,1050-1064;1985
a	1679n	6.05mg 115.mg	0/200	20.6ug	0/200	82.4ug	0/200	.412mg	4/200	
b	1679n	5.33mg n.s.s.	0/200	20.6ug	0/200	82.4ug	2/200	.412mg	3/200	
c	1679n	7.19mg n.s.s.	0/200	20.6ug	0/200	82.4ug	2/200	.412mg	1/200	
d	1679n	11.5mg n.s.s.	0/200	20.6ug	0/200	82.4ug	0/200	.412mg	1/200	
e	1679n	11.5mg n.s.s.	0/200	20.6ug	0/200	82.4ug	0/200	.412mg	1/200	
163	1679n	3.12mg n.s.s.	4/400	.183mg	12/400					
164	1679n	.485mg 1.29mg	0/150	1.96ug	2/100	9.81ug	0/100	39.3ug	2/100 .196mg	28/100
a	1679n	2.64mg 79.3mg	0/150	1.96ug	0/100	9.81ug	0/100	39.3ug	0/100 .196mg	3/100
b	1679n	2.27mg n.s.s.	0/150	1.96ug	0/100	9.81ug	0/100	39.3ug	2/100 .196mg	2/100
c	1679n	2.72mg n.s.s.	0/150	1.96ug	1/100	9.81ug	0/100	39.3ug	0/100 .196mg	3/100
d	1679n	3.23mg n.s.s.	0/150	1.96ug	0/100	9.81ug	0/100	39.3ug	0/100 .196mg	2/100
e	1679n	4.30mg n.s.s.	0/150	1.96ug	0/100	9.81ug	0/100	39.3ug	0/100 .196mg	1/100
165	1679n	.144mg .271mg	0/150	1.37ug	2/100	6.87ug	1/100	27.5ug	9/100 .137mg	58/100
a	1679n	.715mg 3.05mg	0/150	1.37ug	0/100	6.87ug	0/100	27.5ug	1/100 .137mg	12/100
b	1679n	1.85mg 55.5mg	0/150	1.37ug	0/100	6.87ug	0/100	27.5ug	0/100 .137mg	3/100
c	1679n	1.85mg 55.5mg	0/150	1.37ug	0/100	6.87ug	0/100	27.5ug	0/100 .137mg	3/100
d	1679n	.658mg n.s.s.	7/150	1.37ug	6/100	6.87ug	5/100	27.5ug	9/100 .137mg	13/100
e	1679n	1.85mg n.s.s.	0/150	1.37ug	0/100	6.87ug	0/100	27.5ug	1/100 .137mg	2/100
f	1679n	5.33mg n.s.s.	0/150	1.37ug	1/100	6.87ug	0/100	27.5ug	0/100 .137mg	0/100
HYDROCHLORIC ACID (hydrogen chloride) 7647-01-0										
166	1674	14.8mg n.s.s.	1/99	.781mg	1/99					Sellakumar;txap,81,401-406;1985
a	1674	24.1mg n.s.s.	0/99	.781mg	0/99					
1-(2-HYDROXYETHYL)-1-NITROSOURA*** (N-nitroso-2-hydroxyethylurea) 13743-07-2										
167	1792	21.6ug .105mg	1/20	.540mg	18/20					Lijinsky;zkko,112,221-228;1986
a	1792	80.3ug .489mg	0/20	.540mg	9/20					
b	1792	.623mg n.s.s.	2/20	.540mg	0/20					
IODOACETAMIDE 144-48-9										
168	1759	21.1mg n.s.s.	0/20	9.87mg	0/20					Shirai;acpj,35,35-43;1985
ISOBUTYL p-HYDROXYBENZOATE 4247-02-3										
169	1688	3.62gm n.s.s.	2/50	188.mg	3/50	375.mg	2/50	751.mg	3/50	Inai;fctx,23,575-578;1985
a	1688	1.15gm n.s.s.	0/50	188.mg	0/50	375.mg	0/50	751.mg	0/50	
b	1688	1.61mg n.s.s.	12/50	188.mg	10/50	375.mg	12/50	751.mg	13/50	
170	1688	3.08gm n.s.s.	0/50	177.mg	4/50	353.mg	0/50	706.mg	2/50	
a	1688	2.84gm n.s.s.	3/50	177.mg	6/50	353.mg	3/50	706.mg	4/50	
b	1688	1.38gm n.s.s.	8/50	177.mg	12/50	353.mg	9/50	706.mg	12/50	
KANECHLOR 400 (PCBs, polychlorinated biphenyls) 12737-87-0										
171	1762	20.8mg n.s.s.	0/10	6.19mg	0/25					Kimura;zkko,87,257-266;1976
LEAD ACETATE*** 301-04-2										
172	1755	13.4mg 68.2mg	0/10	130.mg	13/16					Koller;txpy,13,50-57;1985
a	1755	229.mg n.s.s.	0/10	130.mg	0/16					
b	1755	13.4mg 68.2mg	0/10	130.mg	13/16					
LEAD ACETATE, BASIC*** 1335-32-6										
173	1709	138.mg 604.mg	0/30	400.mg	13/29					Kasprzak;carc,6,279-282;1985
a	1709	1.38gm n.s.s.	0/30	400.mg	0/29					
METHAFURYLENE 531-06-6										
174	1790	80.6mg n.s.s.	1/21	29.5mg	2/20					Lijinsky;zkko,112,57-60;1986
a	1790	77.7mg n.s.s.	6/21	29.5mg	4/20					
175	1790	88.0mg n.s.s.	4/19	23.4mg	1/20					
METHAPHENILENE 493-78-7										
176	1790	70.3mg n.s.s.	1/21	25.7mg	2/20					Lijinsky;zkko,112,57-60;1986
a	1790	83.9mg n.s.s.	6/21	25.7mg	3/20					
177	1790	66.5mg n.s.s.	4/19	18.0mg	2/20					
a	1790	77.5mg n.s.s.	2/19	18.0mg	1/20					
DL-METHIONINE 59-51-8										
178	1803	1.15gm n.s.s.	2/28	419.mg	2/28					Shivapurkar;carc,7,547-550;1986
Z-METHYL-O,N,N-AZOXYETHANE 57497-34-4										
179	1723	5.32mg 46.7mg	2/20	16.2mg	12/20 (72.6mg	10/20)				Lijinsky;canr,45,76-79;1985
a	1723	8.13mg 57.5mg	0/20	16.2mg	8/20 (72.6mg	6/20)				
b	1723	52.9mg 405.mg	0/20	16.2mg	0/20	72.6mg	7/20			
c	1723	83.6mg n.s.s.	0/20	16.2mg	2/20	72.6mg	2/20			
d	1723	67.4mg n.s.s.	2/20	16.2mg	6/20	72.6mg	4/20			

Spe	Strain	Site	Xpo+Xpt		TD50	2Tailpvl
Sex	Route	Hist	Notes		DR	AuOp
HYDRAZINE***						
162	H m	syg inh nas adp	12m24 ers	100ng.....1ug.....10.....100.....1mg.....10.....100.....1g.....10	.	4.16mg * P<.0005+
a	H m	syg inh thy pfa	12m24 ers		+	17.5mg * P<.003 +
b	H m	syg inh col adc	12m24 ers			14.0mg * P<.03 +
c	H m	syg inh sto bcc	12m24 ers			37.6mg * P<.4 +
d	H m	syg inh col ley	12m24 ers			70.5mg * P<.2 +
e	H m	syg inh col pam	12m24 ers			70.5mg * P<.2 +
163	H f	cb6 inh lun ade	12m27 er		.	7.78mg P<.04
164	R f	f34 inh nas adp	12m30 er		.	.758mg 2 P<.0005+
a	R f	f34 inh nas sqp	12m30 er		+	8.72mg * P<.004 +
b	R f	f34 inh nas vlp	12m30 er		.	6.56mg * P<.03 +
c	R f	f34 inh nas adc	12m30 er			9.20mg * P<.03 +
d	R f	f34 inh nas sqc	12m30 er			13.1mg * P<.02 +
e	R f	f34 inh lun b/a	12m30 er			26.4mg * P<.09 +
165	R m	f34 inh nas adp	12m30 er	100ng.....1ug.....10.....100.....1mg.....10.....100.....1g.....10	.	.194mg * P<.0005+
a	R m	f34 inh nas vlp	12m30 er		..	1.36mg * P<.0005+
b	R m	f34 inh lun b/a	12m30 er			6.10mg * P<.004 +
c	R m	f34 inh nas sqp	12m30 er			6.10mg * P<.004 +
d	R m	f34 inh thy car	12m30 er			1.60mg * P<.02
e	R m	f34 inh nas sqc	12m30 er			6.12mg * P<.02 +
f	R m	f34 inh nas adc	12m30 er			no dre P=1. +
HYDROCHLORIC ACID						
166	R m	sda inh liv hpc	30m30 e	100ng.....1ug.....10.....100.....1mg.....10.....100.....1g.....10	>	no dre P=1. -
a	R m	sda inh nac tum	30m30 e			no dre P=1. -
1-(2-HYDROXYETHYL)-1-NITROSOURA***						
167	R m	f34 gev lun a/t	55w55 e	100ng.....1ug.....10.....100.....1mg.....10.....100.....1g.....10	.	46.0ug P<.0005+
a	R m	f34 gev for mix	55w55 e		+	.173mg P<.0005+
b	R m	f34 gev liv nnd	55w55 e		.	no dre P=1.
IODOACETAMIDE						
168	R m	wis wat sto car	74w75 r	100ng.....1ug.....10.....100.....1mg.....10.....100.....1g.....10	.	.
					>	no dre P=1. -
ISOBUTYL p-HYDROXYBENZOATE						
169	M f	icr eat lun tum	24m25	100ng.....1ug.....10.....100.....1mg.....10.....100.....1g.....10	.	.
a	M f	icr eat liv tum	24m25		.	> 37.2gm * P<.8 -
b	M f	icr eat tba mix	24m25			no dre P=1. -
170	M m	icr eat liv tum	24m24			12.3gm * P<.7 -
a	M m	icr eat lun tum	24m24		.	.
b	M m	icr eat tba mix	24m24			> 26.3gm 2 P<.7 -
						no dre P=1. -
						6.57gm * P<.5 -
KANECHLOR 400						
171	R f	don eat liv tum	26w84 e	100ng.....1ug.....10.....100.....1mg.....10.....100.....1g.....10	.	.
					>	no dre P=1. -
LEAD ACETATE***						
172	R m	sda wat kid tcc	76w76 e	100ng.....1ug.....10.....100.....1mg.....10.....100.....1g.....10	.	28.4mg P<.0005+
a	R m	sda wat liv tum	76w76 e		+	no dre P=1.
b	R m	sda wat tba mix	76w76 e		.	28.4mg P<.0005+
LEAD ACETATE, BASIC***						
173	R m	sda eat kid mix	79w79 e	100ng.....1ug.....10.....100.....1mg.....10.....100.....1g.....10	.	.
a	R m	sda eat liv tum	79w79 e		+	266.4mg P<.0005+
METHAFURYLENE						
174	R f	f34 wat tyf mix	22m30 e	100ng.....1ug.....10.....100.....1mg.....10.....100.....1g.....10	.	.
a	R f	f34 wat liv mix	22m30 e		.	> 559.4mg P<.6 -
175	R m	f34 wat liv mix	22m27 e		.	no dre P=1. -
					.	no dre P=1. -
METHAPHENILENE						
176	R f	f34 wat tyf mix	19m30 e	100ng.....1ug.....10.....100.....1mg.....10.....100.....1g.....10	.	.
a	R f	f34 wat liv mix	19m30 e		.	> 487.4mg P<.6 -
177	R m	f34 wat liv mix	19m30 e		.	no dre P=1. -
a	R m	f34 wat tyf mix	19m30 e		.	no dre P=1. -
DL-METHIONINE						
178	R m	f34 eat liv nnd	17m24 e	100ng.....1ug.....10.....100.....1mg.....10.....100.....1g.....10	.	.
					>	no dre P=1. -
Z-METHYL-O,N,N-AZOOXYETHANE						
179	R m	f34 wat liv mix	30w95	100ng.....1ug.....10.....100.....1mg.....10.....100.....1g.....10	.	11.5mg \ P<.002 +
a	R m	f34 wat liv hpc	30w95		+	18.2mg \ P<.0005+
b	R m	f34 wat kid mix	30w95		.	123.4mg * P<.0005+
c	R m	f34 wat liv hes	30w95			302.4mg * P<.3
d	R m	f34 wat liv nnd	30w95			664.4mg * P<.8

Spe	Strain	Site	Xpo+Xpt		TD50	2Tailpvl	
Sex	Route	Hist	Notes		DR	AuOp	
3'-METHYL-4-DIMETHYLAMINOAZOBENZENE			1ug.....10.....100.....1mg.....10.....100.....1g.....10			
180	R m	gav	liv hpc	52w52 bek	>	3.64mg P<.4 +	
181	R m	f3d	eat	liv hpc	24m24 e	.3.28mg * P<.0005+	
a	R m	f3d	eat	liv thc	24m24 e	4.94mg * P<.0005	
b	R m	f3d	eat	liv ghc	24m24 e	10.1mg Z P<.0005	
c	R m	f3d	eat	liv clc	24m24 e	46.7mg * P<.0005	
METHYL METHACRYLATE				100ng.....1ug.....10.....100.....1mg.....10.....100.....1g.....10			
182	M f	b6c	inh	TBA MXB	24m24	>:	no dre P=1. -
a	M f	b6c	inh	liv MXB	24m24	no dre P=1.	
b	M f	b6c	inh	lun MXB	24m24	4.01gm \ P<.3	
183	M m	b6c	inh	TBA MXB	24m24	>:	no dre P=1. -
a	M m	b6c	inh	liv MXB	24m24	no dre P=1.	
b	M m	b6c	inh	lun MXB	24m24	no dre P=1.	
184	R f	f34	inh	TBA MXB	24m24	>:	500mg * P<.7 -
a	R f	f34	inh	liv MXB	24m24	2.14gm * P<.1	
185	R m	f34	inh	TBA MXB	24m24	>:	no dre P=1. -
a	R m	f34	inh	liv MXB	24m24	1.27gm * P<.2	
N-METHYL-N'-NITRO-N-NITROSOGUANIDINE***			1ug.....10.....100.....1mg.....10.....100.....1g.....10			
186	R m	alb	wat	gam adc	34w52 er	.. + ..	.403mg P<.003 +
187	R f	wis	wat	duo adc	32w57 r	>	6.38mg P<.5 +
a	R f	wis	wat	stg adc	32w57 r	6.38mg P<.5 +	
188	R m	wis	wat	duo adc	32w57 r	>	2.72mg P<.4 +
METHYLENE CHLORIDE***				100ng.....1ug.....10.....100.....1mg.....10.....100.....1g.....10			
189	M m	b6c	wat	liv mix	24m24 e	.. *	1.31gm * P<.07 -
a	M m	b6c	wat	liv hpc	24m24 e	2.35gm * P<.2 -	
b	M m	b6c	wat	liv hps	24m24 e	2.90gm * P<.2 -	
c	M m	b6c	wat	thy tum	24m24 e	no dre P=1. -	
190	R f	f34	wat	liv nnd	78w78 ek	>:	no dre P=1. -
191	R f	f34	wat	liv mix	18m24 e	.. ± ..	1.54gm P<.02 -
a	R f	f34	wat	liv nnd	18m24 e	1.54gm P<.02 -	
b	R f	f34	wat	liv hpc	18m24 e	no dre P=1. -	
192	R f	f34	wat	liv mix	24m24 e	.. + ..	1.43gm * P<.003 -
a	R f	f34	wat	liv nnd	24m24 e	2.34gm * P<.02 -	
b	R f	f34	wat	liv hpc	24m24 e	3.63gm * P<.06 -	
193	R m	f34	wat	liv nnd	78w78 ek	>:	no dre P=1. -
194	R m	f34	wat	liv nnd	18m24 e	>:	1.61gm P<.4 -
a	R m	f34	wat	liv mix	18m24 e	3.66gm P<.8 -	
b	R m	f34	wat	liv hpc	18m24 e	no dre P=1. -	
195	R m	f34	wat	liv mix	24m24 e	>:	no dre P=1. -
a	R m	f34	wat	liv nnd	24m24 e	no dre P=1. -	
b	R m	f34	wat	liv hpc	24m24 e	no dre P=1. -	
N-[4-(5-NITRO-2-FURYL)-2-TIAZOOLYL]FORMAMIDE***			10.....100.....1mg.....10.....100.....1g.....10			
196	M f	nmr	gav	for sqc	68w75 esv	.. + ..	139.4mg * P<.0005+
a	M f	nmr	gav	for pam	68w75 esv	164.4mg * P<.0005+	
b	M f	nmr	gav	stg mal	68w75 esv	944.4mg * P<.02	
c	M f	nmr	gav	liv mal	68w75 esv	2.39gm * P<.2	
d	M f	nmr	gav	lun adc	68w75 esv	no dre P=1.	
e	M f	nmr	gav	tba mal	68w75 esv	59.5mg * P<.0005	
f	M f	nmr	gav	tba ben	68w75 esv	69.4mg * P<.0005	
1-NITROSO-1-HYDROXYETHYL-3-CHLOROETHYLUREA			1ug.....10.....100.....1mg.....10.....100.....1g.....10			
197	R f	f34	gav	liv mix	9m27 e	.. + ..	.488mg P<.0005+
a	R f	f34	gav	liv nnd	9m27 e	.564mg P<.0005+	
b	R f	f34	gav	liv hpc	9m27 e	.653mg P<.0005+	
c	R f	f34	gav	---	mnl 9m27 e	.760mg P<.02	
d	R f	f34	gav	liv clc	9m27 e	4.38mg P<.09 +	
e	R f	f34	gav	ktu mix	9m27 e	4.38mg P<.09 +	
198	R m	f34	gav	liv mix	8m28 e	.. + ..	.150mg * P<.0005+
a	R m	f34	gav	liv hpc	8m28 e	.233mg * P<.0005+	
b	R m	f34	gav	ktu mix	8m28 e	.663mg * P<.0005+	
c	R m	f34	gav	liv clc	8m28 e	.926mg * P<.0005+	
d	R m	f34	gav	liv nnd	8m28 e	1.19mg * P<.02 +	
1-NITROSO-1-(2-HYDROXYPROPYL)-3-CHLOROETHYLUREA			10.....100.....1mg.....10.....100.....1g.....10			
199	R f	f34	gav	liv mix	40w95 e	.. + ..	.885mg P<.0005+
a	R f	f34	gav	liv nnd	40w95 e	.885mg P<.0005+	
b	R f	f34	gav	---	mnl 40w95 e	.962mg P<.05	
c	R f	f34	gav	liv hpc	40w95 e	8.81mg P<.3 +	
200	R m	f34	gav	liv mix	8m28 e	.. + ..	.861mg * P<.0005+
a	R m	f34	gav	liv nnd	8m28 e	1.17mg * P<.002 +	
b	R m	f34	gav	liv hpc	8m28 e	2.71mg * P<.004 +	
c	R m	f34	gav	lun a/t	8m28 e	2.39mg * P<.02	

RefNum	LoConf	UpConf	Cntrl	1Dose	1Inc	2Dose	2Inc		Citation or Pathology	Brkly Code
3'-METHYL-4-DIMETHYLAMINOAZOBENZENE 55-80-1										
180	1710	.590mg	n.s.s.	0/5	2.50mg	1/9			Styles;carc,6,21-28;1985	
181	1756	2.04mg	5.42mg	0/30	.960mg	4/27	4.80mg	21/23	24.0mg	26/28 Ogiso;txpy,13,257-265;1985
a	1756	3.06mg	8.18mg	0/30	.960mg	3/27	4.80mg	14/23	24.0mg	26/28
b	1756	4.56mg	32.2mg	0/30	.960mg	1/27	4.80mg	7/23	(24.0mg	0/28)
c	1756	22.6mg	120.0mg	0/30	.960mg	0/27	4.80mg	0/23	24.0mg	10/28
METHYL METHACRYLATE 80-62-6										
182	c50680	1.08gm	n.s.s.	34/50	631.0mg	19/50	(1.26gm	19/50)		
a	c50680	1.82gm	n.s.s.	7/50	631.0mg	4/50	(1.26gm	2/50)	Liv:hpa,hpc,nnd.	
b	c50680	1.04gm	n.s.s.	2/50	631.0mg	5/50	(1.26gm	0/50)	lun:a/a,a/c.	
183	c50680	1.32gm	n.s.s.	30/50	526.0mg	17/50	(1.05gm	17/50)		
a	c50680	2.07gm	n.s.s.	16/50	526.0mg	7/50	(1.05gm	7/50)	Liv:hpa,hpc,nnd.	
b	c50680	7.86gm	n.s.s.	11/50	526.0mg	1/50	1.05gm	4/50	lun:a/a,a/c.	
184	c50680	78.2mg	n.s.s.	40/50	75.1mg	46/50	150.0mg	44/50		
a	c50680	526.0mg	n.s.s.	0/50	75.1mg	0/50	150.0mg	2/50	Liv:hpa,hpc,nnd.	
185	c50680	139.0mg	n.s.s.	44/50	105.0mg	46/50	210.0mg	45/50		
a	c50680	477.0mg	n.s.s.	0/50	105.0mg	3/50	210.0mg	2/50	Liv:hpa,hpc,nnd.	
N-METHYL-N'-NITRO-N-NITROSOGUANIDINE*** (MNNG) 70-25-7										
186	1778	.160mg	1.90mg	0/6	2.83mg	7/10			Gurkalo;bexb,101,833-837;1986	
187	1726	1.04mg	n.s.s.	0/5	1.59mg	1/20			Yasui;canr,45,4763-4767;1985	
a	1726	1.04mg	n.s.s.	0/5	1.59mg	1/20				
188	1726	.668mg	n.s.s.	0/5	1.39mg	2/20				
METHYLENE CHLORIDE*** (dichloromethane, Freon 30) 75-09-2										
189	1802	540.0mg	n.s.s.	24/125	60.0mg	51/200	125.0mg	30/100	185.0mg	31/99
a	1802	815.0mg	n.s.s.	14/125	60.0mg	33/200	125.0mg	18/100	185.0mg	17/99
b	1802	1.01gm	n.s.s.	10/125	60.0mg	20/200	125.0mg	14/100	185.0mg	14/99
c	1802	825.0mg	n.s.s.	0/125	60.0mg	0/200	125.0mg	0/100	185.0mg	0/99
190	1801m	9.99mg	n.s.s.	0/20	5.00mg	0/20	50.0mg	0/20	125.0mg	0/20
191	1801n	379.0mg	n.s.s.	0/100	188.0mg	2/25			Serota;fctx,24,951-958;1986	
a	1801n	379.0mg	n.s.s.	0/100	188.0mg	2/25				
b	1801n	966.0mg	n.s.s.	0/100	188.0mg	0/25				
192	1801o	638.0mg	10.1gm	0/100	5.00mg	1/50	50.0mg	4/50	125.0mg	1/50
a	1801o	880.0mg	n.s.s.	0/100	5.00mg	1/50	50.0mg	2/50	125.0mg	1/50
b	1801o	1.25gm	n.s.s.	0/100	5.00mg	0/50	50.0mg	2/50	125.0mg	0/50
193	1801m	489.0mg	n.s.s.	0/20	5.00mg	1/20	50.0mg	2/20	125.0mg	1/20
194	1801n	307.0mg	n.s.s.	9/100	188.0mg	4/25				
a	1801n	341.0mg	n.s.s.	13/100	188.0mg	4/25				
b	1801n	966.0mg	n.s.s.	4/100	188.0mg	0/25				
195	1801o	2.41gm	n.s.s.	13/100	5.00mg	1/50	50.0mg	1/50	125.0mg	2/50
a	1801o	2.58gm	n.s.s.	9/100	5.00mg	1/50	50.0mg	1/50	125.0mg	1/50
b	1801o	3.01gm	n.s.s.	4/100	5.00mg	0/50	50.0mg	0/50	125.0mg	1/50
N-[4-(5-NITRO-2-FURYL)-2-THIAZOLYL]FORMAMIDE*** (FANFT) 24554-26-5										
196	1771	89.7mg	232.0mg	0/100	114.0mg	14/60	115.0mg	4/13	118.0mg	12/44
a	1771	103.0mg	285.0mg	0/100	114.0mg	18/60	115.0mg	1/13	118.0mg	7/44
b	1771	358.0mg	n.s.s.	0/100	114.0mg	5/60	115.0mg	0/13	118.0mg	0/44
c	1771	588.0mg	n.s.s.	0/100	114.0mg	0/60	115.0mg	0/13	118.0mg	2/44
d	1771	106.0mg	n.s.s.	1/100	114.0mg	0/60	115.0mg	0/13	118.0mg	0/44
e	1771	40.0mg	103.0mg	18/100	114.0mg	35/60	115.0mg	7/13	118.0mg	27/44
f	1771	48.4mg	107.0mg	4/100	114.0mg	32/60	115.0mg	5/13	118.0mg	18/44
1-NITROSO-1-HYDROXYETHYL-3-CHLOROETHYLUREA ---										
197	1792	.242mg	1.17mg	0/20	.582mg	12/19			Lijinsky;zkko,112,221-228;1986	
a	1792	.274mg	1.40mg	0/20	.582mg	11/19				
b	1792	.310mg	1.70mg	0/20	.582mg	10/19				
c	1792	.308mg	n.s.s.	4/20	.582mg	11/19				
d	1792	1.08mg	n.s.s.	0/20	.582mg	2/19				
e	1792	1.08mg	n.s.s.	0/20	.582mg	2/19				
198	1792	73.4mg	.298mg	2/20	.390mg	18/20	.758mg	20/20		
a	1792	.135mg	.412mg	0/20	.390mg	14/20	.758mg	20/20		
b	1792	.387mg	1.25mg	0/20	.390mg	7/20	.758mg	14/20		
c	1792	.519mg	2.01mg	0/20	.390mg	7/20	.758mg	10/20		
d	1792	.564mg	n.s.s.	2/20	.390mg	10/20	.758mg	8/20		
1-NITROSO-1-(2-HYDROXYPROPYL)-3-CHLOROETHYLUREA ---										
199	1792	.396mg	2.80mg	0/20	.791mg	8/20			Lijinsky;zkko,112,221-228;1986	
a	1792	.396mg	2.80mg	0/20	.791mg	8/20				
b	1792	.358mg	n.s.s.	4/20	.791mg	10/20				
c	1792	1.43mg	n.s.s.	0/20	.791mg	1/20				
200	1792	.462mg	2.43mg	2/20	.438mg	4/19	.751mg	15/20		
a	1792	.587mg	5.55mg	2/20	.438mg	4/19	.751mg	12/20		
b	1792	1.17mg	16.8mg	0/20	.438mg	1/19	.751mg	6/20		
c	1792	1.01mg	n.s.s.	1/20	.438mg	2/19	.751mg	7/20		

Spe	Strain	Site	Xpo+Xpt		TD50	2Tailpvl
Sex	Route	Hist	Notes		DR	AuOp
NITROSO-5-METHYLOXAZOLIDONE			100ng....1ug....10.....100.....1mg....10.....100.....1g.....10			
201	H f	syg gav for mix	28w60 e	.	.172mg	P<.0005+
N-NITROSO-1,3-OXAZOLIDINE			100ng....1ug....10.....100.....1mg....10.....100.....1g.....10			
202	H f	syg gav for mix	7m24 e	.	2.61mg	P<.07 +
a	H f	syg gav liv tum	7m24 e	+	no dre	P=1.
N-NITROSOPYRROLIDINE***			100ng....1ug....10.....100.....1mg....10.....100.....1g.....10			
203	M m	swi gav tba mix	76w76 e	.	.679mg	P<.002 +
204	R m	chm wat liv hpc	84w84	.	.659mg	P<.0005+
a	R m	chm wat liv nnd	84w84	.	1.13mg	P<.0005+
b	R m	chm wat liv clc	84w84	.	14.8mg	P<.1 +
205	R f	f34 wat liv hpc	7m26 e	<+	no TD50	P<.0005+
a	R f	f34 wat liv nnd	7m26 e	.	2.51mg	P<.04 +
b	R f	f34 wat liv hes	7m26 e	.	15.0mg	P<.3 +
c	R f	f34 wat liv clc	7m26 e	.	15.0mg	P<.3 +
d	R f	f34 wat tba mix	7m26 e	.	no TD50	P<.6 +
206	R m	sda wat liv hpc	20m30	.	.648mg	P<.0005+
a	R m	sda wat tba mal	20m30	.	.631mg	P<.0005
207	R m	sda wat liv hpc	10m30	.	.489mg	P<.0005+
a	R m	sda wat tba mal	10m30	.	.501mg	P<.0005
NITROUS OXIDE			100ng....1ug....10.....100.....1mg....10.....100.....1g.....10			
208	M f	sww inh lun ade	78w83	.	309.gm	* P<.08 -
a	M f	sww inh Liv tum	78w83	*	no dre	P=1. -
b	M f	sww inh mix tum	78w83	*	no dre	P=1. -
209	M m	sww inh lun ade	78w83 s	*	no dre	P=1. -
a	M m	sww inh mix tum	78w83 s	*	no dre	P=1. -
b	M m	sww inh Liv tum	78w83 s	*	no dre	P=1. -
OCHRATOXIN A***			100ng....1ug....10.....100.....1mg....10.....100.....1g.....10			
210	M f	b6c eat liv hpc	24m24 er	.	34.8mg	* P<.02 +
a	M f	b6c eat Liv hpa	24m24 er	.	109.mg	* P<.3
b	M f	b6c eat kid mix	24m24 er	.	no dre	P=1.
211	M m	b6c eat kid mix	24m24 er	.	3.53mg	* P<.0005+
a	M m	b6c eat kid ade	24m24 er	.	4.64mg	* P<.0005
b	M m	b6c eat kid car	24m24 er	.	10.3mg	* P<.0005
c	M m	b6c eat Liv hpa	24m24 er	.	48.1mg	* P<.3
d	M m	b6c eat liv hpc	24m24 er	.	58.7mg	* P<.2
OCTACHLOROSTYRENE			100ng....1ug....10.....100.....1mg....10.....100.....1g.....10			
212	R f	sda eat Liv tum	52w52	.	no dre	P=1.
213	R m	sda eat liv tum	52w52	.	no dre	P=1.
OLEATE, SODIUM			100ng....1ug....10.....100.....1mg....10.....100.....1g.....10			
214	R f	f3d wat liv hnd	25m25 e	.	no dre	P=1. -
a	R f	f3d wat tba mix	25m25 e	.	no dre	P=1. -
215	R m	f3d wat pan mix	25m25 e	.	10.1gm	* P<.003 -
a	R m	f3d wat pan ism	25m25 e	.	12.6gm	* P<.005 -
b	R m	f3d wat liv hnd	25m25 e	.	29.1gm	* P<.03 -
c	R m	f3d wat liv mix	25m25 e	.	39.3gm	* P<.2 -
d	R m	f3d wat tba mix	25m25 e	.	no dre	P=1. -
OMEPRAZOLE			100ng....1ug....10.....100.....1mg....10.....100.....1g.....10			
216	M f	cd1 gav gam cnd	78w78 er	.	no dre	P=1.
217	M m	cd1 gav gam cnd	78w78 er	.	no dre	P=1.
218	R f	sda gav gam cnd	24m24 er	.	63.0mg	Z P<.0005
219	R m	sda gav gam cnd	24m24 er	.	1.12gm	* P<.0005
OXAMYL			100ng....1ug....10.....100.....1mg....10.....100.....1g.....10			
220	M f	cd1 eat tba mix	24m24 v	.	no dre	P=1. -
221	M m	cd1 eat tba mix	24m24 v	.	no dre	P=1. -
222	R f	cdr eat liv hph	24m24 eg	.	no dre	P=1. -
223	R m	cdr eat liv tum	24m24 eg	.	no dre	P=1. -
N-OXYDIETHYLENE THiocarbamyl-N-OXYDIETHYLENE SULFENAMIDE.....			100.....1mg.....10.....100.....1g.....10			
224	R f	sda eat unt tum	52w52 ek	.	no dre	P=1.
225	R f	sda eat unt mix	26m26 e	.	96.9mg	Z P<.0005+
a	R f	sda eat ubl mix	26m26 e	.	206.mg	* P<.0005+
b	R f	sda eat kid mix	26m26 e	.	338.mg	* P<.0005+
c	R f	sda eat kid sqc	26m26 e	.	571.mg	* P<.007
d	R f	sda eat kid utc	26m26 e	.	571.mg	* P<.007
e	R f	sda eat ubl utp	26m26 e	.	571.mg	* P<.007 +
f	R f	sda eat ubl sqp	26m26 e	.	862.mg	* P<.03 +

RefNum	LoConf	UpConf	Cntrl	1Dose	1Inc	2Dose	2Inc		Citation or Pathology	Brkly Code	
NITROSO-5-METHYLOXAZOLIDONE 201	1672	80.7ug .391mg	1/20	1.70mg	18/20				Lijinsky;canr,45,542-545;1985		
N-NITROSO-1,3-OXAZOLIDINE (nitrosooxazolidone) 39884-52-1 202	1672	.855mg n.s.s.	1/20	.899mg	5/20				Lijinsky;canr,45,542-545;1985		
a	1672	3.71mg n.s.s.	0/20	.899mg	0/20						
N-NITROSOPIRROLIDINE*** 930-55-2 203	1713	.309mg 2.84mg	1/20	1.19mg	10/20				Shah;zkko,109,203-207;1985		
204	1774	.340mg 1.35mg	0/23	3.00mg	20/23				Chung;canr,46,1285-1289;1986		
a	1774	.601mg 2.40mg	0/23	3.00mg	16/23						
b	1774	3.63mg n.s.s.	0/23	3.00mg	2/23						
205	1795	n.s.s. .409mg	0/20	1.00mg	20/20				Michejda;canr,46,2252-2256;1986/pers.comm.		
a	1795	.915mg n.s.s.	1/20	1.00mg	6/20						
b	1795	2.44mg n.s.s.	0/20	1.00mg	1/20						
c	1795	2.44mg n.s.s.	0/20	1.00mg	1/20						
d	1795	n.s.s. n.s.s.	19/20	1.00mg	20/20						
206	1717m	.454mg .958mg	0/80	.657mg	53/80				Hoos;clet,26,77-82;1985		
a	1717m	.412mg 1.10mg	19/80	.657mg	60/80						
207	1717n	.346mg .712mg	0/80	.657mg	61/80						
a	1717n	.333mg .826mg	19/80	.657mg	65/80						
NITROUS OXIDE (nitrogen oxide) 10024-97-2 208	1769	118.gm n.s.s.	25/88	35.5gm	24/77	142.gm	31/75		Baden;anes,64,747-750;1986		
a	1769	841.gm n.s.s.	4/88	35.5gm	2/77	142.gm	2/75				
b	1769	465.gm n.s.s.	19/88	35.5gm	11/77	142.gm	11/75				
209	1769	39.7gm n.s.s.	34/91	29.5gm	28/75	(118.gm	16/76)				
a	1769	320.gm n.s.s.	9/91	29.5gm	10/75	118.gm	8/76				
b	1769	483.gm n.s.s.	11/91	29.5gm	8/75	118.gm	6/76				
OCHRATOXIN A*** 303-47-9 210	1691	12.3mg n.s.s.	0/47	.130mg	1/45	5.20mg	5/49		Bendele;jnci,75,733-739;1985		
a	1691	21.7mg n.s.s.	0/47	.130mg	1/45	5.20mg	2/49				
b	1691	1.18mg n.s.s.	0/47	.130mg	0/45	5.20mg	0/49				
211	1691	2.25mg 5.92mg	0/50	.120mg	0/47	4.80mg	31/50				
a	1691	2.87mg 8.13mg	0/50	.120mg	0/47	4.80mg	26/50				
b	1691	5.52mg 22.5mg	0/50	.120mg	0/47	4.80mg	14/50				
c	1691	12.2mg n.s.s.	1/50	.120mg	5/47	4.80mg	6/50				
d	1691	14.5mg n.s.s.	0/50	.120mg	3/47	4.80mg	4/50				
OCTACHLOROSTYRENE 29082-74-4 212	1773	n.s.s. n.s.s.	0/20	250.ng	0/20	2.50ug	0/20	25.0ug	0/20	2.50mg	0/20 Chu;faat,6,69-77;1986
213	1773	n.s.s. n.s.s.	0/20	200.ng	0/20	2.00ug	0/20	20.0ug	0/20	.200mg	0/20
OLEATE, SODIUM 143-19-1 214	1687	22.2gm n.s.s.	0/43	1.43gm	1/39	2.86gm	0/45		Hiasa;fctx,23,619-623;1985		
a	1687	2.99gm n.s.s.	24/43	1.43gm	28/39	2.86gm	25/45				
215	1687	5.09gm 45.3gm	0/41	1.25gm	4/40	2.50gm	7/45				
a	1687	5.91gm 94.5gm	0/41	1.25gm	3/40	2.50gm	6/45				
b	1687	10.0gm n.s.s.	0/41	1.25gm	0/40	2.50gm	4/45				
c	1687	10.8gm n.s.s.	1/41	1.25gm	0/40	2.50gm	4/45				
d	1687	625.mg n.s.s.	40/41	1.25gm	40/40	2.50gm	43/45				
OMEPRAZOLE 73590-58-6 216	1781m	63.3mg n.s.s.	0/109	14.1mg	0/55	44.0mg	0/55	141.mg	0/55		Havu;dgsn,35,42-55;1986/pers.comm.
217	1781m	63.3mg n.s.s.	0/109	14.1mg	0/55	44.0mg	0/55	141.mg	0/55		
218	1781n	41.1mg 103.ng	0/120	14.1mg	13/60	44.0mg	19/60	(141.mg	24/60)		
219	1781n	486.mg 3.65gm	0/119	14.1mg	0/60	44.0mg	1/60	141.mg	6/60		
OXAMYL 23135-22-0 220	1788	55.8mg n.s.s.	32/80	3.25mg	42/79	6.50mg	28/79	9.94mg	27/80		Kennedy;faat,7,106-118;1986/pers.comm.
221	1788	30.7mg n.s.s.	35/80	3.00mg	36/79	6.00mg	28/80	9.17mg	29/78		
222	1788	46.4mg n.s.s.	1/60	7.50mg	0/30						
223	1788	37.1mg n.s.s.	0/60	6.00mg	0/30						
N-OXYDIETHYLENE THIOCARBAMYL-N-OXYDIETHYLENE SULFENAMIDE (OTOS) 13752-51-7 224	1765m	.351mg n.s.s.	0/10	1.00mg	0/10	3.00mg	0/10	10.0mg	0/10	30.0mg	0/10 Hinderer;txap,82,521-531;1986/pers.comm.
225	1765n	54.0mg 200.ng	0/50	1.00mg	0/50	3.00mg	0/50	10.0mg	0/50	30.0mg	16/50
a	1765n	93.4mg 604.ng	0/50	1.00mg	0/50	3.00mg	0/50	10.0mg	0/50	30.0mg	8/50
b	1765n	128.mg 1.44mg	0/50	1.00mg	0/50	3.00mg	0/50	10.0mg	0/50	30.0mg	5/50
c	1765n	173.mg 10.6gm	0/50	1.00mg	0/50	3.00mg	0/50	10.0mg	0/50	30.0mg	3/50
d	1765n	173.mg 10.6gm	0/50	1.00mg	0/50	3.00mg	0/50	10.0mg	0/50	30.0mg	3/50
e	1765n	173.mg 10.6gm	0/50	1.00mg	0/50	3.00mg	0/50	10.0mg	0/50	30.0mg	3/50
f	1765n	212.mg n.s.s.	0/50	1.00mg	0/50	3.00mg	0/50	10.0mg	0/50	30.0mg	2/50

Spe Strain Site Xpo+Xpt	TD50	ZTailpvl
Sex Route Hist Notes	DR	AuOp
g R f sda eat ubl utc 26m26 e	862.mg *	P<.03 +
h R f sda eat kid utp 26m26 e	1.74gm *	P<.2
i R f sda eat ubl sqc 26m26 e	1.74gm *	P<.2 +
226 R m sda eat unt tum 52w52 ek .>	no dre	P=1.
227 R m sda eat unt mix 26m26 e	. + .	85.5mg Z P<.0005+
a R m sda eat ubl mix 26m26 e		130.mg *
b R m sda eat ubl utc 26m26 e		340.mg *
c R m sda eat ubl utp 26m26 e		457.mg *
d R m sda eat kid mix 26m26 e		528.mg *
e R m sda eat kid utc 26m26 e		690.mg *
f R m sda eat ubl sqc 26m26 e		690.mg *
g R m sda eat ubl sqp 26m26 e		1.39gm *
h R m sda eat kid sqc 26m26 e		1.39gm *
i R m sda eat kid utp 26m26 e		no dre P=1.
OXYTETRACYCLINE.HCl 100ng...1ug...10...100...1mg...10...100...1g...10		
228 M f b6c eat TBA MXB 24m24 .>	no dre	P=1. -
a M f b6c eat liv MXB 24m24		no dre P=1.
b M f b6c eat lun MXB 24m24		no dre P=1.
229 M m b6c eat TBA MXB 24m24 .>	no dre	P=1. -
a M m b6c eat liv MXB 24m24		no dre P=1.
b M m b6c eat lun MXB 24m24		no dre P=1.
230 R f f34 eat ute ess 24m24 .>	24.0gm *	P<.05
a R f f34 eat pta adn 24m24		5.23gm *
b R f f34 eat TBA MXB 24m24		76.2gm *
c R f f34 eat liv MXB 24m24		10.9gm *
231 R m f34 eat and MXA 24m24 .>	no dre	P=1.
a R m f34 eat TBA MXB 24m24		no dre P=1.
b R m f34 eat liv MXB 24m24		no dre P=1.
PENTACHLORONITROBENZENE*** 100ng...1ug...10...100...1mg...10...100...1g...10		#2.00gm *
232 M f b6c eat lun a/a 24m24 s : * #2.00gm *	P<.04	-
a M f b6c eat MXA MXA 24m24 s		2.34gm *
b M f b6c eat TBA MXB 24m24 s		1.01gm *
c M f b6c eat liv MXB 24m24 s		2.50gm *
d M f b6c eat lun MXB 24m24 s		3.44gm *
233 M m b6c eat TBA MXB 24m24 .>	13.0gm *	P<1. -
a M m b6c eat liv MXB 24m24		23.1gm *
b M m b6c eat lun MXB 24m24		no dre P=1.
PHENOBARBITAL*** 100ng...1ug...10...100...1mg...10...100...1g...10		
234 H m syg eat liv mix 52w52 er .>	no dre	P=1. -
235 M m chh eat liv esn 55w55 ekr <+	no TD50	P<.009
a M m chh eat liv bsn 55w55 ekr		56.6mg P<.5
236 M m chh eat liv esn 65w65 ekr .+ .		49.8mg P<.0005
a M m chh eat liv bsn 65w65 ekr		no dre P=1.
237 R f f34 wat liv hpa 76w76 er .>		99.2mg P<.3
238 R m f34 wat liv hpa 76w76 er .>		86.8mg P<.3
239 R m f34 wat liv hpa 72w72 e .+ .		45.0mg P<.08
240 R m f34 eat liv nnd 17m24 e .>	no dre	P=1. -
PHENOBARBITAL, SODIUM*** 100ng...1ug...10...100...1mg...10...100...1g...10		
241 M f bal wat lun ade 27m28 .>	1.21gm	P<.5 -
a M f bal wat liv hpc 27m28		no dre P=1. -
b M f bal wat tba mix 27m28		no dre P=1. -
242 M m bal wat lun ade 27m27 .>	no dre	P=1. -
a M m bal wat liv hpc 27m27		no dre P=1. -
b M m bal wat tba mix 27m27		no dre P=1. -
243 R m f34 eat liv nnd 95w95 .+ .	120.mg *	P<.004
a R m f34 eat thy cca 95w95		31.7mg \ P<.03
PHENYLEPHRINE.HCl 100ng...1ug...10...100...1mg...10...100...1g...10		
244 M f b6c eat TBA MXB 24m24 .>	911.mg *	P<.4 -
a M f b6c eat liv MXB 24m24		7.85gm *
b M f b6c eat lun MXB 24m24		1.61gm *
245 M m b6c eat sub fbs 24m24 : * #1.64gm *	P<.04 -	
a M m b6c eat MXA MXA 24m24		1.72gm *
b M m b6c eat TBA MXB 24m24		6.33gm *
c M m b6c eat liv MXB 24m24		4.27gm *
d M m b6c eat lun MXB 24m24		2.13gm *
246 R f f34 eat TBA MXB 24m24 .>	272.mg *	P<.7 -
a R f f34 eat liv MXB 24m24		no dre P=1. -
247 R m f34 eat TBA MXB 24m24 .>		no dre P=1. -
a R m f34 eat liv MXB 24m24		no dre P=1.

RefNum	LoConf	UpConf	Cntrl	1Dose	1Inc	2Dose	2Inc	Citation or Pathology						Brkly Code
g 1765n	212.mg	n.s.s.	0/50	1.00mg	0/50	3.00mg	0/50	10.0mg	0/50	30.0mg	2/50			
h 1765n	283.mg	n.s.s.	0/50	1.00mg	0/50	3.00mg	0/50	10.0mg	0/50	30.0mg	1/50			
i 1765n	283.mg	n.s.s.	0/50	1.00mg	0/50	3.00mg	0/50	10.0mg	0/50	30.0mg	1/50			
226 1765m	.281mg	n.s.s.	0/10	.800mg	0/10	2.40mg	0/10	8.00mg	0/10	24.0mg	0/10			
227 1765n	46.3mg	189.mg	1/50	.800mg	0/50	2.40mg	0/50	8.00mg	0/50	24.0mg	15/50			
a 1765n	63.4mg	334.mg	0/50	.800mg	0/50	2.40mg	0/50	8.00mg	0/50	24.0mg	10/50			
b 1765n	117.mg	2.03gm	0/50	.800mg	0/50	2.40mg	0/50	8.00mg	0/50	24.0mg	4/50			
c 1765n	138.mg	8.46gm	0/50	.800mg	0/50	2.40mg	0/50	8.00mg	0/50	24.0mg	3/50			
d 1765n	143.mg	n.s.s.	1/50	.800mg	0/50	2.40mg	0/50	8.00mg	0/50	24.0mg	3/50			
e 1765n	170.mg	n.s.s.	0/50	.800mg	0/50	2.40mg	0/50	8.00mg	0/50	24.0mg	2/50			
f 1765n	170.mg	n.s.s.	0/50	.800mg	0/50	2.40mg	0/50	8.00mg	0/50	24.0mg	2/50			
g 1765n	226.mg	n.s.s.	0/50	.800mg	0/50	2.40mg	0/50	8.00mg	0/50	24.0mg	1/50			
h 1765n	226.mg	n.s.s.	0/50	.800mg	0/50	2.40mg	0/50	8.00mg	0/50	24.0mg	1/50			
i 1765n	6.52mg	n.s.s.	1/50	.800mg	0/50	2.40mg	0/50	8.00mg	0/50	24.0mg	0/50			
OXYTETRACYCLINE.HCL 2058-46-0														
228 c56473	2.12gm	n.s.s.	43/50	811.mg	34/50	1.61gm	36/50							
a c56473	12.4gm	n.s.s.	6/50	811.mg	0/50	1.61gm	2/50							
b c56473	6.10gm	n.s.s.	3/50	811.mg	3/50	1.61gm	3/50							
229 c56473	1.58gm	n.s.s.	36/50	749.mg	32/50	1.49gm	33/50							
a c56473	2.37gm	n.s.s.	18/50	749.mg	15/50	1.49gm	17/50							
b c56473	4.32gm	n.s.s.	10/50	749.mg	9/50	1.49gm	6/50							
230 c56473	8.10gm	n.s.s.	0/50	1.24gm	1/50	2.48gm	3/50							S
a c56473	1.79gm	n.s.s.	19/50	1.24gm	17/50	2.48gm	30/50							
b c56473	1.60gm	n.s.s.	49/50	1.24gm	44/50	2.48gm	49/50							
c c56473	6.17gm	n.s.s.	5/50	1.24gm	4/50	2.48gm	6/50							
231 c56473	1.91gm	n.s.s.	12/50	990.mg	19/50	1.98gm	24/50							
a c56473	723.mg	n.s.s.	48/50	990.mg	48/50	(1.98gm)	42/50							
b c56473	4.52gm	n.s.s.	6/50	990.mg	5/50	1.98gm	9/50							
PENTACHLORONITROBENZENE*** (PCNB) 82-68-8														
232 c00419	770.mg	n.s.s.	1/50	322.mg	4/50	644.mg	4/50							
a c00419	881.mg	n.s.s.	0/50	322.mg	3/50	644.mg	2/50							
b c00419	284.mg	n.s.s.	27/50	322.mg	24/50	644.mg	21/50							
c c00419	720.mg	n.s.s.	3/50	322.mg	4/50	644.mg	4/50							
d c00419	896.mg	n.s.s.	3/50	322.mg	4/50	644.mg	4/50							
233 c00419	527.mg	n.s.s.	31/50	297.mg	34/50	594.mg	29/50							
a c00419	804.mg	n.s.s.	17/50	297.mg	18/50	594.mg	16/50							
b c00419	1.90gm	n.s.s.	9/50	297.mg	4/50	594.mg	6/50							
PHENOBARBITAL*** (phenobarbitone, sodium) 50-06-6														
234 1804	23.7mg	n.s.s.	0/5	46.0mg	0/10									
235 1776m	n.s.s.	22.6mg	0/5	85.0mg	5/5									
a 1776m	8.26mg	n.s.s.	1/5	85.0mg	2/5									
236 1776n	24.8mg	123.mg	0/30	85.0mg	11/30									
a 1776n	68.8mg	n.s.s.	12/30	85.0mg	8/30									
237 1689	16.1mg	n.s.s.	0/10	28.6mg	1/10									
238 1689	14.1mg	n.s.s.	0/10	25.0mg	1/10									
239 1690	11.0mg	n.s.s.	0/13	25.0mg	2/12									
240 1803	38.2mg	n.s.s.	2/28	14.0mg	2/28									
PHENOBARBITAL, SODIUM*** (phenobarbitone, sodium) 57-30-7														
241 1772	209.mg	n.s.s.	7/50	95.8mg	6/30									
a 1772	789.mg	n.s.s.	0/50	95.8mg	0/30									
b 1772	274.mg	n.s.s.	12/50	95.8mg	6/30									
242 1772	219.mg	n.s.s.	19/50	83.3mg	8/30									
a 1772	630.mg	n.s.s.	0/50	83.3mg	0/30									
b 1772	246.mg	n.s.s.	22/50	83.3mg	8/30									
243 1783	60.5mg	908.mg	1/42	20.0mg	7/42	60.0mg	10/42							
a 1783	13.7mg	n.s.s.	9/42	20.0mg	19/42	(60.0mg)	11/42							
PHENYLEPHRINE.HCL 61-76-7														
244 c55641	236.mg	n.s.s.	22/50	161.mg	31/50	322.mg	27/50							
a c55641	1.01gm	n.s.s.	3/50	161.mg	2/50	322.mg	4/50							
b c55641	579.mg	n.s.s.	2/50	161.mg	6/50	322.mg	6/50							
245 c55641	744.mg	n.s.s.	0/50	149.mg	4/50	297.mg	4/50							
a c55641	742.mg	n.s.s.	0/50	149.mg	2/50	297.mg	5/50							
b c55641	274.mg	n.s.s.	27/50	149.mg	30/50	297.mg	34/50							
c c55641	409.mg	n.s.s.	15/50	149.mg	15/50	297.mg	20/50							
d c55641	485.mg	n.s.s.	6/50	149.mg	11/50	297.mg	11/50							
246 c55641	37.9mg	n.s.s.	44/50	30.7mg	45/50	61.9mg	42/50							
a c55641	714.mg	n.s.s.	2/50	30.7mg	0/50	61.9mg	0/50							
247 c55641	20.1mg	n.s.s.	45/50	24.6mg	42/50	(49.5mg)	29/50							
a c55641	348.mg	n.s.s.	5/50	24.6mg	1/50	49.5mg	2/50							

Spe Strain Site Xpo+Xpt		TD50	2Tailpvl	
Sex Route Hist Notes		DR	AuOp	
o-PHENYLPHENATE, SODIUM***	<u>100ng....1ug....10....100....1mg....10....100....1g....10</u>			
248 R f f3d eat ubl mix 65w65 er	.	2.88gm *	P<.1 +	
a R f f3d eat ubl tcc 65w65 er	*	5.89gm *	P<.3 +	
b R f f3d eat ubl tpp 65w65 er		5.89gm *	P<.3 +	
249 R m f3d eat ubl can 24m24 er	.	3.18gm *	P<.04 +	
a R m f3d eat ubl pam 24m24 er		3.18gm *	P<.04 +	
250 R m f3d eat ubl mix 65w65 er	+	195.mg /	P<.0005+	
a R m f3d eat ubl tcc 65w65 er		364.mg /	P<.0005+	
b R m f3d eat ubl tpp 65w65 er		852.mg *	P<.008 +	
PHOSPHINE	<u>100ng....1ug....10....100....1mg....10....100....1g....10</u>			
251 R f sda eat tba tum 52w52 ek	>	no dre	P=1. -	
252 R f sda eat tba mix 24m24 e		no dre	P=1. -	
253 R m sda eat tba tum 52w52 ek	>	no dre	P=1. -	
254 R m sda eat tba mix 24m24 e	>	no dre	P=1. -	
PIPERONYL BUTOXIDE***	<u>100ng....1ug....10....100....1mg....10....100....1g....10</u>			
255 R f f3d eat liv nnd 24m26 e	.	> no dre	P=1. -	
a R f f3d eat tba mix 24m26 e		no dre	P=1. -	
256 R m f3d eat liv nnd 24m26 e	.	>	7.69gm *	P<.3 -
a R m f3d eat liv hpc 24m26 e			20.1gm *	P<.3 -
b R m f3d eat tba mix 24m26 e			no dre	P=1. -
POTASSIUM CHLORIDE	<u>100ng....1ug....10....100....1mg....10....100....1g....10</u>			
257 R m f34 eat amd phe 24m24	.	>	6.21gm *	P<.2 -
a R m f34 eat mgl fba 24m24			33.5gm Z	P<.5 -
PREDNIMUSTINE	<u>100ng....1ug....10....100....1mg....10....100....1g....10</u>			
258 R f sda gav auc sqc 18m24	.	+	19.2mg *	P<.005 +
a R f sda gav tba ben 18m24			14.0mg *	P<.5 -
b R f sda gav tba mal 18m24			21.6mg *	P<.3 -
PREDNISOLONE	<u>100ng....1ug....10....100....1mg....10....100....1g....10</u>			
259 R f sda gav tba ben 18m24	.	>	1.96mg *	P<.2 -
a R f sda gav tba mal 18m24			no dre	P=1. -
RETINOL ACETATE	<u>100ng....1ug....10....100....1mg....10....100....1g....10</u>			
260 R f f3d wat amd phe 24m25 e	.	+	227.mg *	P<.0005
a R f f3d wat cli ade 24m25 e			1.02gm *	P<.02
b R f f3d wat liv nnd 24m25 e			7.34gm *	P<.9
c R f f3d wat tba mix 24m25 e			no dre	P=1.
261 R m f3d wat amd phe 24m25 e	.	+	86.4mg *	P<.0005
a R m f3d wat spl mnl 24m25 e			548.mg *	P<.04
b R m f3d wat amd phm 24m25 e			552.mg *	P<.02
c R m f3d wat liv nnd 24m25 e			2.06gm *	P<.3
d R m f3d wat liv mix 24m25 e			3.67gm *	P<.7
e R m f3d wat liv cho 24m25 e			6.47gm *	P<1.
f R m f3d wat liv hpc 24m25 e			no dre	P=1.
g R m f3d wat tba mix 24m25 e			noTD50	P=1.
SACCHARIN, SODIUM***	<u>100ng....1ug....10....100....1mg....10....100....1g....10</u>			
262 R m f34 eat ubl pam 24m24	.		.54.1gm	P<.3 +
263 R m f34 eat liv nnd 95w95			no dre	P=1.
264 R m f34 eat liv tum 61w68 e	.	>	no dre	P=1.
SODIUM CHLORIDE	<u>100ng....1ug....10....100....1mg....10....100....1g....10</u>			
265 M f b6c wat lun ptm 24m24 e	.	>	4.98gm	P<.2
a M f b6c wat liv hnd 24m24 e			1.33kg	P<1.
b M f b6c wat tba mix 24m24 e			no dre	P=1.
266 M m b6c wat lun ptm 24m24 e	.	>	3.74gm	P<.3
a M m b6c wat liv hnd 24m24 e			5.97gm	P<.4
b M m b6c wat liv hem 24m24 e			9.55gm	P<.2
c M m b6c wat liv hpt 24m24 e			no dre	P=1.
d M m b6c wat tba mix 24m24 e			992.mg	P<.2 -
267 R m f34 eat amd phe 24m24	.	+	2.98gm	P<.02 -
SODIUM CHLORITE	<u>100ng....1ug....10....100....1mg....10....100....1g....10</u>			
268 M f b6c wat liv mix 85w85 e	.	>	3.06gm *	P<.9
a M f b6c wat liv hnd 85w85 e			no dre	P=1.
b M f b6c wat lun mix 85w85 e			no dre	P=1.
c M f b6c wat tba mix 85w85 e			no dre	P=1.
269 M m b6c wat lun mix 85w85 e	.	+	237.mg *	P<.004
a M m b6c wat liv mix 85w85 e			110.mg *	P<.07
b M m b6c wat liv hnd 85w85 e			146.mg *	P<.06
c M m b6c wat lun ade 85w85 e			346.mg *	P<.02
d M m b6c wat tba mix 85w85 e			169.mg *	P<.4

RefNum	LoConf	UpConf	Cntrl	1Dose	1Inc	2Dose	2Inc		Citation or Pathology	Brkly Code
o-PHENYLPHENATE, SODIUM*** 132-27-4										
248	1777	707.mg n.s.s.	0/15	500.mg	0/15	1.00gm	2/15		Fujii;fctx,24,207-211;1986	
a	1777	958.mg n.s.s.	0/15	500.mg	0/15	1.00gm	1/15			
b	1777	958.mg n.s.s.	0/15	500.mg	0/15	1.00gm	1/15			
249	1752	779.mg n.s.s.	0/7	100.mg	0/9	200.mg	0/8	400.mg 0/9 800.mg 2/5	Fukushima;onco,42,304-311;1985	
a	1752	779.mg n.s.s.	0/7	100.mg	0/9	200.mg	0/8	400.mg 0/9 800.mg 2/5		
250	1777	103.mg 423.mg	0/14	400.mg	0/15	800.mg	15/15		Fujii;fctx,24,207-211;1986	
a	1777	175.mg 959.mg	0/14	400.mg	0/15	800.mg	10/15			
b	1777	322.mg 13.7gm	0/14	400.mg	0/15	800.mg	5/15			
PHOSPHINE 7803-51-2										
251	1692m	245.ng n.s.s.	0/20	250.ng	0/19				Telle;fctx,23,1001-1009;1985	
252	1692n	43.1ng n.s.s.	10/10	250.ng	10/11					
253	1692m	206.ng n.s.s.	0/19	200.ng	0/20					
254	1692n	264.ng n.s.s.	2/11	200.ng	1/10					
PIPERONYL BUTOXIDE*** 51-03-6										
255	1686	4.33gm n.s.s.	0/47	236.mg	1/49	473.mg	0/49		Maeckawa;fctx,23,675-682;1985	
a	1686	726.mg n.s.s.	35/47	236.mg	39/49	473.mg	30/49			
256	1686	1.88gm n.s.s.	1/48	189.mg	1/48	378.mg	3/46			
a	1686	3.28gm n.s.s.	0/48	189.mg	0/48	378.mg	1/46			
b	1686	267.mg n.s.s.	48/48	189.mg	48/48	378.mg	41/46			
POTASSIUM CHLORIDE 7447-40-7										
257	1807	1.84gm n.s.s.	11/50	100.mg	16/50	400.mg	20/50	1.60gm 19/50	Imai;jnma,37,115-127;1986	
a	1807	5.60gm n.s.s.	0/50	100.mg	6/50	400.mg	1/50	1.60gm 4/50		
PREDNIMUSTINE 29069-24-7										
258	1770	6.64mg 167.mg	0/120	1.29mg	2/30	2.58mg	2/30		Berger;smon,13,8-13;1986	
a	1770	2.92mg n.s.s.	43/120	1.29mg	12/30	2.58mg	13/30			
b	1770	5.23mg n.s.s.	13/120	1.29mg	3/30	2.58mg	6/30			
PREDNISOLONE 50-24-8										
259	1770	.599mg n.s.s.	43/120	.323mg	12/30	.645mg	15/30		Berger;smon,13,8-13;1986	
a	1770	2.37mg n.s.s.	13/120	.323mg	4/30	.645mg	2/30			
RETINOL ACETATE 127-47-9										
260	1693	135.mg 539.mg	3/50	68.8mg	11/49	138.mg	20/48		Kurokawa;jnci,74,715-723;1985	
a	1693	416.mg n.s.s.	1/50	68.8mg	1/49	138.mg	7/48			
b	1693	1.20gm n.s.s.	0/50	68.8mg	1/49	138.mg	0/48			
c	1693	115.mg n.s.s.	39/50	68.8mg	40/49	138.mg	36/48			
261	1693	51.8mg 212.mg	18/49	60.2mg	27/50	120.mg	39/48			
a	1693	251.mg n.s.s.	1/49	60.2mg	8/50	120.mg	6/48			
b	1693	246.mg n.s.s.	3/49	60.2mg	4/50	120.mg	11/48			
c	1693	533.mg n.s.s.	1/49	60.2mg	2/50	120.mg	3/48			
d	1693	537.mg n.s.s.	2/49	60.2mg	3/50	120.mg	3/48			
e	1693	1.05gm n.s.s.	0/49	60.2mg	1/50	120.mg	0/48			
f	1693	440.mg n.s.s.	1/49	60.2mg	0/50	120.mg	0/48			
g	1693	n.s.s. n.s.s.	49/49	60.2mg	50/50	120.mg	48/48			
SACCHARIN, SODIUM*** 128-44-9										
262	1722	8.81gm n.s.s.	0/40	2.00gm	1/40				Hasegawa;canr,45,1469-1473;1985	
263	1783	14.4gm n.s.s.	1/42	2.00gm	0/42			Imaida;canr,46,6160-6164;1986		
264	1786	4.58gm n.s.s.	0/36	1.79gm	0/29			Sakata;canr,46,3903-3906;1986		
SODIUM CHLORIDE 7647-14-5										
265	1806	1.50gm n.s.s.	13/96	880.mg	11/47				Van Duuren;enhp,69,109-117;1986	
a	1806	5.27gm n.s.s.	2/96	880.mg	1/47					
b	1806	547.mg n.s.s.	84/96	880.mg	40/47					
266	1806	1.08gm n.s.s.	22/99	733.mg	16/50					
a	1806	1.44gm n.s.s.	15/99	733.mg	11/50					
b	1806	2.34gm n.s.s.	3/99	733.mg	4/50					
c	1806	2.51gm n.s.s.	12/99	733.mg	6/50					
d	1806	297.mg n.s.s.	76/99	733.mg	43/50					
267	1807	1.36gm n.s.s.	11/50	1.60gm	23/50				Imai;jnma,37,115-127;1986	
SODIUM CHLORITE 7758-19-2										
268	1789	225.mg n.s.s.	5/47	50.0mg	5/50	100.mg	6/50		Kurokawa;enhp,69,221-235;1986	
a	1789	292.mg n.s.s.	5/47	50.0mg	3/50	100.mg	5/50			
b	1789	442.mg n.s.s.	3/47	50.0mg	2/50	100.mg	2/50			
c	1789	151.mg n.s.s.	14/47	50.0mg	17/50	100.mg	13/50			
269	1789	115.mg 1.26gm	0/35	41.7mg	3/47	83.3mg	7/43			
a	1789	46.8mg n.s.s.	7/35	41.7mg	22/47	83.3mg	17/43			
b	1789	65.1mg n.s.s.	3/35	41.7mg	14/47	83.3mg	11/43			
c	1789	149.mg n.s.s.	0/35	41.7mg	2/47	83.3mg	5/43			
d	1789	45.5mg n.s.s.	14/35	41.7mg	27/47	83.3mg	22/43			

Spe	Strain	Site	Xpo+Xpt		T050	2Tailpvl
Sex	Route	Hist	Notes		DR	AuOp
270	R f	f34 wat tba mix	85w85 es	>	no dre	P=1. -
271	R m	f34 wat tba mix	85w85 es	>	no dre	P=1. -
SODIUM HYPOCHLORITE			100ng....1ug....10.....100.....1mg....10.....100.....1g.....10			
272	M f	b6c wat lun a/2	24m25 e	>	22.9gm *	P<1. -
a	M f	b6c wat liv mix	24m25 e		no dre	P=1. -
b	M f	b6c wat liv hpc	24m25 e		no dre	P=1. -
c	M f	b6c wat tba mix	24m25 e		no dre	P=1. -
273	M m	b6c wat liv mix	24m25 e	>	876.mg *	P<.5
a	M m	b6c wat lun a/2	24m25 e		2.04gm *	P<.5
b	M m	b6c wat liv hpc	24m25 e		no dre	P=1. -
c	M m	b6c wat tba mix	24m25 e		350.mg *	P<.4
274	R f	f3d wat liv mix	24m26 e	>	6.30gm *	P<1. -
275	R m	f3d wat liv cho	24m26 e	>	no dre	P=1. -
a	R m	f3d wat liv fih	24m26 e		no dre	P=1. -
b	R m	f3d wat liv mix	24m26 e		no dre	P=1. -
STYRENE OXIDE***			100ng....1ug....10.....100.....1mg....10.....100.....1g.....10			
276	M f	b6c gav for mix	24m25 e	. + .	172.mg \	P<.0005+
a	M f	b6c gav for sqp	24m25 e		460.mg *	P<.0005+
b	M f	b6c gav for sqc	24m25 e		505.mg \	P<.0005+
c	M f	b6c gav liv mix	24m25 e		5.96gm *	P<.6
277	M m	b6c gav for mix	24m25 e	. + .	90.0mg \	P<.0005+
a	M m	b6c gav for sqp	24m25 e		215.mg \	P<.0005+
b	M m	b6c gav liv mix	24m25 e		223.mg \	P<.002
c	M m	b6c gav for sqc	24m25 e		475.mg *	P<.0005+
278	R f	f34 gav for mix	24m25 e	. + .	42.9mg *	P<.0005+
a	R f	f34 gav for sqc	24m25 e		114.mg *	P<.0005+
b	R f	f34 gav for sqp	24m25 e		217.mg *	P<.0005+
c	R f	f34 gav liv nnd	24m25 e		no dre	P=1.
279	R m	f34 gav for mix	24m25 e	. + .	30.7mg *	P<.0005+
a	R m	f34 gav for sqc	24m25 e		81.6mg *	P<.0005+
b	R m	f34 gav for sqp	24m25 e		146.mg \	P<.0005+
c	R m	f34 gav liv nnd	24m25 e		10.3gm *	P<.7
TETRACHLORVINPHOS***			100ng....1ug....10.....100.....1mg....10.....100.....1g.....10			
280	M f	b6c eat liv mix	24m24 er	. + .	10.2gm	P<.0005
a	M f	b6c eat liv hpc	24m24 er		12.4gm	P<.002
b	M f	b6c eat kid mix	24m24 er		32.1gm	P<.04
c	M f	b6c eat liv hpa	24m24 er		65.0gm	P<.2
281	M f	b6c eat liv mix	24m24 er	. + 6.33gm *	P<.0005	
a	M f	b6c eat liv hpc	24m24 er		8.99gm *	P<.0005
b	M f	b6c eat liv hpa	24m24 er		21.4gm *	P<.007
c	M f	b6c eat kid tum	24m24 er		no dre	P=1.
282	M m	b6c eat liv mix	24m24 er	. + .	1.15gm	P<.0005
a	M m	b6c eat liv hpc	24m24 er		1.53gm	P<.0005
b	M m	b6c eat kid mix	24m24 er		4.42gm	P<.0005
c	M m	b6c eat kid tuc	24m24 er		5.26gm	P<.0005
d	M m	b6c eat liv hpa	24m24 er		18.3gm	P<.08
e	M m	b6c eat kid tua	24m24 er		37.6gm	P<.3
TETRAKIS(HYDROXYMETHYL)PHOSPHONIUM CHLORIDE.1ug....10.....100.....1mg....10.....100.....1g.....10						
283	M f	b6c gav TBA MXB	24m24	>	908.mg *	P<1. -
a	M f	b6c gav liv MXB	24m24		200.mg *	P<.4
b	M f	b6c gav lun MXB	24m24		no dre	P=1.
284	M m	b6c gav TBA MXB	24m24	>	no dre	P=1. -
a	M m	b6c gav liv MXB	24m24		no dre	P=1.
b	M m	b6c gav lun MXB	24m24		103.mg *	P<.6
285	R f	f34 gav TBA MXB	24m24	: ±	4.78mg *	P<.09 -
a	R f	f34 gav liv MXB	24m24		no dre	P=1.
286	R m	f34 gav sub fib	24m24	: ±	#24.9mg *	P<.03 -
a	R m	f34 gav TBA MXB	24m24		14.7mg *	P<.7
b	R m	f34 gav liv MXB	24m24		24.5mg *	P<.3
TETRAKIS(HYDROXYMETHYL)PHOSPHONIUM SULFATE..1ug....10.....100.....1mg....10.....100.....1g.....10						
287	M f	b6c gav mul lml	24m24	: ±	#15.7mg *	P<.02 -
a	M f	b6c gav TBA MXB	24m24		no dre	P=1.
b	M f	b6c gav liv MXB	24m24		no dre	P=1.
c	M f	b6c gav lun MXB	24m24		234.mg *	P<.8
288	M m	b6c gav mul MXA	24m24	: ±	#11.4mg \	P<.04 -
a	M m	b6c gav TBA MXB	24m24		47.3mg *	P<.8

RefNum	LoConf	UpConf	Cntrl	1Dose	1Inc	2Dose	2Inc	Citation or Pathology	Brkly Code
270	1789	69.9mg n.s.s.	21/47	17.1mg	14/44	34.3mg	15/50		
271	1789	155.0mg n.s.s.	28/34	15.0mg	3/30	30.0mg	6/43		
SODIUM HYPOCHLORITE (Clorox; hypochlorous acid, sodium salt) 7681-52-9									
272	1789	734.0mg n.s.s.	7/72	97.2mg	6/50	194.0mg	5/50	Kurokawa;enhp,69,221-235;1986	
a	1789	965.0mg n.s.s.	9/72	97.2mg	9/50	194.0mg	3/50		
b	1789	1.96gm n.s.s.	4/72	97.2mg	1/50	194.0mg	1/50		
c	1789	285.0mg n.s.s.	42/72	97.2mg	34/50	194.0mg	26/50		
273	1789	187.0mg n.s.s.	31/73	81.0mg	27/50	162.0mg	24/50		
a	1789	402.0mg n.s.s.	10/73	81.0mg	9/50	162.0mg	9/50		
b	1789	377.0mg n.s.s.	24/73	81.0mg	17/50	162.0mg	15/50		
c	1789	92.1mg n.s.s.	53/73	81.0mg	39/50	162.0mg	40/50		
274	1789	1.03gm n.s.s.	0/50	53.1mg	1/50	106.0mg	0/50	Hasegawa;fctx,24,1295-1302;1986	
275	1780	450.0mg n.s.s.	0/49	23.2mg	1/50	46.4mg	0/50		
a	1780	450.0mg n.s.s.	0/49	23.2mg	1/50	46.4mg	0/50		
b	1780	589.0mg n.s.s.	1/49	23.2mg	1/50	46.4mg	0/50		
STYRENE OXIDE*** 96-09-3									
276	1791	105.0mg 309.0mg	0/51	155.0mg	24/50	(311.0mg)	20/51)	Lijinsky;jnci,77,471-476;1986	
a	1791	298.0mg 775.0mg	0/51	155.0mg	14/50	311.0mg	17/51		
b	1791	246.0mg 1.35gm	0/51	155.0mg	10/50	(311.0mg)	3/51)		
c	1791	969.0mg n.s.s.	7/51	155.0mg	4/50	311.0mg	9/51		
277	1791	57.8mg 150.0mg	2/51	155.0mg	37/51	(311.0mg)	21/52)		
a	1791	124.0mg 458.0mg	2/51	155.0mg	22/51	(311.0mg)	8/52)		
b	1791	113.0mg 1.17gm	12/51	155.0mg	28/52	(311.0mg)	15/52)		
c	1791	308.0mg 828.0mg	0/51	155.0mg	16/51	311.0mg	15/52		
278	1791	29.8mg 61.7mg	0/52	114.0mg	46/52	228.0mg	50/52		
a	1791	83.0mg 161.0mg	0/52	114.0mg	32/52	228.0mg	36/52		
b	1791	150.0mg 328.0mg	0/52	114.0mg	21/52	228.0mg	24/52		
c	1791	472.0mg n.s.s.	8/52	114.0mg	6/52	(228.0mg)	0/52)		
279	1791	19.4mg 47.0mg	1/52	114.0mg	50/52	228.0mg	50/51		
a	1791	59.6mg 114.0mg	0/52	114.0mg	35/52	228.0mg	43/51		
b	1791	87.2mg 283.0mg	1/52	114.0mg	23/52	(228.0mg)	18/51)		
c	1791	1.35gm n.s.s.	2/52	114.0mg	1/52	228.0mg	3/52		
TETRACHLORVINPHOS*** 961-11-5									
280	1696m	4.17gm 36.9gm	0/99	2.08gm	6/47			Parker;faat,5,840-854;1985	
a	1696m	4.72gm 54.7gm	0/99	2.08gm	5/47				
b	1696m	7.91gm n.s.s.	0/99	2.08gm	2/47				
c	1696m	10.6gm n.s.s.	0/99	2.08gm	1/47				
281	1696n	4.04gm 15.4gm	0/99	2.28mg	1/48	8.32mg	0/49	41.6mg	0/50
				2.08gm	7/50				208.mg
a	1696n	4.63gm 25.8gm	0/99	2.28mg	0/48	8.32mg	0/49	41.6mg	0/50
				2.08gm	4/50				208.mg
b	1696n	12.2gm 428.0gm	0/99	2.28mg	1/48	8.32mg	0/49	41.6mg	0/50
				2.08gm	3/50				208.mg
c	1696n	16.5mg n.s.s.	0/99	2.28mg	0/48	8.32mg	0/49	41.6mg	0/50
				2.08gm	0/50				208.mg
282	1696m	660.0mg 2.42gm	26/99	1.92gm	35/46				
a	1696m	855.0mg 3.63gm	24/99	1.92gm	31/46				
b	1696m	2.23gm 11.3gm	1/99	1.92gm	12/46				
c	1696m	2.56gm 13.5gm	0/99	1.92gm	10/46				
d	1696m	5.26gm n.s.s.	2/99	1.92gm	4/46				
e	1696m	7.50gm n.s.s.	1/99	1.92gm	2/46				
TETRAKIS(HYDROXYMETHYL)PHOSPHONIUM CHLORIDE (THPC) 124-64-1									
283	c55061	19.2mg n.s.s.	35/50	10.5mg	32/50	21.2mg	36/50		
a	c55061	47.9mg n.s.s.	4/50	10.5mg	4/50	21.2mg	7/50	liv:hpa,hpc,nnd.	
b	c55061	101.0mg n.s.s.	3/50	10.5mg	3/50	21.2mg	2/50	lun:a/a,a/c.	
284	c55061	12.9mg n.s.s.	33/50	5.31mg	31/50	10.6mg	33/50		
a	c55061	25.8mg n.s.s.	17/50	5.31mg	15/50	10.6mg	13/50	liv:hpa,hpc,nnd.	
b	c55061	19.1mg n.s.s.	4/50	5.31mg	6/50	10.6mg	8/50	lun:a/a,a/c.	
285	c55061	1.84mg n.s.s.	40/50	2.65mg	45/50	5.31mg	36/50		
a	c55061	n.s.s. n.s.s.	0/50	2.65mg	1/50	5.31mg	0/50	liv:hpa,hpc,nnd.	
286	c55061	9.06mg n.s.s.	0/50	2.65mg	2/50	5.31mg	3/50		\$
a	c55061	2.34mg n.s.s.	42/50	2.65mg	42/50	5.31mg	36/50		
b	c55061	6.80mg n.s.s.	1/50	2.65mg	4/50	5.31mg	2/50	liv:hpa,hpc,nnd.	
TETRAKIS(HYDROXYMETHYL)PHOSPHONIUM SULFATE (THPS) 55566-30-8									
287	c55050	7.73mg n.s.s.	1/50	3.54mg	8/50	7.07mg	9/50		
a	c55050	5.58mg n.s.s.	32/50	3.54mg	35/50	7.07mg	35/50	liv:hpa,hpc,nnd.	
b	c55050	33.4mg n.s.s.	7/50	3.54mg	3/50	7.07mg	3/50	lun:a/a,a/c.	
c	c55050	21.4mg n.s.s.	2/50	3.54mg	3/50	7.07mg	3/50		
288	c55050	4.59mg n.s.s.	2/50	3.54mg	10/50	(7.07mg)	1/50)		
a	c55050	4.26mg n.s.s.	33/50	3.54mg	38/50	7.07mg	38/50	mul:mh,mim,mip,mlu,ule. \$	

	RefNum	LoConf	UpConf	Cntrl	1Dose	1Inc	2Dose	2Inc	Citation or Pathology	Brkly Code
b	c55050	10.9mg	n.s.s.	18/50	3.54mg	12/50	7.07mg	17/50	Liv:hpa,hpc,nnd.	
c	c55050	9.59mg	n.s.s.	7/50	3.54mg	10/50	7.07mg	9/50	lun:a/a,a/c.	
289	c55050	3.69mg	n.s.s.	45/50	3.50mg	46/50	7.01mg	41/50	Liv:hpa,hpc,nnd.	
a	c55050	30.1mg	n.s.s.	3/50	3.50mg	2/50	7.01mg	2/50	Liv:hpa,hpc,nnd.	
290	c55050	1.03mg	n.s.s.	30/50	3.50mg	36/50	(7.01mg	20/50)	pta:adn,can.	S
a	c55050	1.38mg	n.s.s.	21/50	3.50mg	27/50	(7.01mg	14/50)	pta:adn,can.	S
b	c55050	1.44mg	n.s.s.	21/50	3.50mg	26/50	(7.01mg	14/50)		S
c	c55050	.766mg	n.s.s.	46/50	3.50mg	49/50	(7.01mg	37/50)	Liv:hpa,hpc,nnd.	
d	c55050	3.19mg	n.s.s.	3/50	3.50mg	5/50	(7.01mg	1/50)	Liv:hpa,hpc,nnd.	
THENYLDIAMINE 91-79-2										
291	1790	96.3mg	n.s.s.	1/21	25.1mg	1/20			Lijinsky;zkko,112,57-60;1986	
a	1790	53.7mg	n.s.s.	6/21	25.1mg	5/20				
292	1790	23.0mg	n.s.s.	4/19	17.6mg	7/20				
a	1790	75.6mg	n.s.s.	2/19	17.6mg	1/20				
THIABENDAZOLE (2-(4-thiazolyl)-benzimidazole) 148-79-8										
293	1777	113.0mg	n.s.s.	0/15	100.0mg	0/14			Fujii;fctx,24,207-211;1986	
294	1777	96.6mg	n.s.s.	1/14	80.0mg	0/15				
a	1777	96.6mg	n.s.s.	1/14	80.0mg	0/15				
TILIDINE FUMARATE (Valoron) 55567-81-2										
295	1794	88.4mg	n.s.s.	10/100	16.0mg	7/50	40.0mg	11/50	100.0mg	12/50
a	1794	62.5mg	n.s.s.	2/100	16.0mg	0/50	40.0mg	0/50	100.0mg	0/50
b	1794	79.7mg	n.s.s.	38/100	16.0mg	24/50	40.0mg	25/50	100.0mg	21/50
c	1794	96.3mg	n.s.s.	32/100	16.0mg	21/50	40.0mg	19/50	100.0mg	18/50
d	1794	172.0mg	n.s.s.	14/100	16.0mg	6/50	40.0mg	7/50	100.0mg	8/50
296	1794	148.0mg	n.s.s.	15/100	16.0mg	7/50	40.0mg	9/50	100.0mg	9/50
a	1794	334.0mg	n.s.s.	0/100	16.0mg	2/50	40.0mg	0/50	100.0mg	1/50
b	1794	401.0mg	n.s.s.	9/100	16.0mg	3/50	40.0mg	4/50	100.0mg	2/50
c	1794	73.9mg	n.s.s.	25/100	16.0mg	17/50	40.0mg	22/50	100.0mg	17/50
d	1794	90.9mg	n.s.s.	21/100	16.0mg	16/50	40.0mg	18/50	100.0mg	14/50
e	1794	243.0mg	n.s.s.	9/100	16.0mg	5/50	40.0mg	6/50	100.0mg	4/50
297	1794	222.0mg	2.88gm	2/100	16.0mg	1/50	40.0mg	5/50	100.0mg	7/50
a	1794	169.0mg	n.s.s.	17/100	16.0mg	8/50	40.0mg	12/50	100.0mg	13/50
b	1794	136.0mg	n.s.s.	74/100	16.0mg	36/50	40.0mg	32/50	100.0mg	34/50
c	1794	83.8mg	n.s.s.	81/100	16.0mg	39/50	40.0mg	36/50	100.0mg	40/50
298	1794	413.0mg	n.s.s.	4/100	16.0mg	6/50	40.0mg	3/50	100.0mg	3/50
a	1794	54.3mg	n.s.s.	55/100	16.0mg	29/50	40.0mg	29/50	100.0mg	38/50
b	1794	97.6mg	n.s.s.	45/100	16.0mg	22/50	40.0mg	20/50	100.0mg	29/50
c	1794	166.0mg	n.s.s.	16/100	16.0mg	9/50	40.0mg	14/50	100.0mg	12/50
TOLUENE*** 108-88-3										
299	bt903	281.0mg	3.19gm	10/49	237.0mg	21/40			Maltoni;ajim,7,415-446;1985	
300	bt903	371.0mg	n.s.s.	11/45	237.0mg	18/40				
TOLUENE DIISOCYANATE, COMMERCIAL GRADE (2,4 (80%)- AND 2,6 (20%)-) 26471-62-5										
301	c50533	97.9mg	612.0mg	2/50	42.5mg	4/50	84.1mg	16/50	abc:hes; liv:hes,hpa; ova:hes; spl:hem; sub:hem.	C
a	c50533	103.0mg	5.59gm	4/50	42.5mg	5/50	84.1mg	15/50	liv:hpa,hpc.	S
b	c50533	121.0mg	2.38gm	2/50	42.5mg	3/50	84.1mg	12/50	abc:hes; liv:hes; ova:hes; spl:hem; sub:hem.	
c	c50533	236.0mg	10.7gm	0/50	42.5mg	1/50	84.1mg	5/50	abc:hes; liv:hes; ova:hes.	S
d	c50533	362.0mg	n.s.s.	0/50	42.5mg	0/50	84.1mg	3/50	liv:hpa,hpc,nnd.	
e	c50533	66.0mg	n.s.s.	26/50	42.5mg	31/50	84.1mg	30/50	lun:a/a,a/c.	
f	c50533	103.0mg	5.59gm	4/50	42.5mg	5/50	84.1mg	15/50	liv:hpa,hpc,nnd.	
g	c50533	282.0mg	n.s.s.	0/50	42.5mg	3/50	84.1mg	1/50	liv:hpa,hpc,nnd.	
302	c50533	75.0mg	n.s.s.	22/50	84.9mg	27/50	(168.0mg	9/50)	liv:hpa,hpc,nnd.	
a	c50533	371.0mg	n.s.s.	11/50	84.9mg	12/50	168.0mg	5/50	lun:a/a,c.	
b	c50533	416.0mg	n.s.s.	2/50	84.9mg	5/50	168.0mg	2/50	liv:hpa,hpc,nnd.	
303	c50533	14.7mg	57.3mg	19/50	42.1mg	26/50	83.3mg	24/50	liv:nnd; mgl:fba; pni:isa; sub:fbs,fib.	C
a	c50533	18.5mg	87.1mg	15/50	42.1mg	21/50	83.3mg	18/50	pni:isa,isc.	S
b	c50533	44.4mg	344.0mg	3/50	42.1mg	8/50	83.3mg	8/50		S
c	c50533	51.9mg	383.0mg	0/50	42.1mg	7/50	83.3mg	2/50		S
d	c50533	58.3mg	523.0mg	0/50	42.1mg	6/50	83.3mg	2/50		S
e	c50533	58.4mg	2.25gm	2/50	42.1mg	5/50	83.3mg	4/50		S
f	c50533	67.1mg	3.51gm	2/50	42.1mg	3/50	83.3mg	5/50		S
g	c50533	87.6mg	1.88gm	0/50	42.1mg	1/50	83.3mg	3/50		S
h	c50533	32.1mg	n.s.s.	25/50	42.1mg	15/50	83.3mg	16/50		S
i	c50533	33.7mg	n.s.s.	27/50	42.1mg	15/50	83.3mg	16/50	pit:cra,crc.	S
j	c50533	73.7mg	43.3gm	2/50	42.1mg	1/50	83.3mg	5/50	sub:fbs,fib.	
k	c50533	87.3mg	n.s.s.	0/50	42.1mg	4/50	83.3mg	0/50		S
l	c50533	13.6mg	82.8mg	45/50	42.1mg	36/50	83.3mg	34/50	liv:hpa,hpc,nnd.	
m	c50533	44.4mg	344.0mg	3/50	42.1mg	8/50	83.3mg	8/50	tes:ict,itm.	S
304	c50533	6.93mg	71.9mg	48/50	21.0mg	35/50	41.7mg	30/50	pan:ana; sub:fbs,fib.	C
a	c50533	14.9mg	65.4mg	4/50	21.0mg	8/50	41.7mg	14/50	sub:fbs,fib.	
b	c50533	18.0mg	88.4mg	3/50	21.0mg	6/50	41.7mg	12/50		
c	c50533	23.2mg	183.0mg	1/50	21.0mg	3/50	41.7mg	7/50		

Spe	Strain	Site	Xpo+Xpt		TD50	2Tailpvl	
Sex	Route	Hist	Notes		DR	AuOp	
b	M m b6c	gav liv	MXB 24m24		no dre	P=1.	
c	M m b6c	gav lun	MXB 24m24		78.5mg *	P<.8	
289	R f f34	gav TBA	MXB 24m25	:>	23.3mg *	P<.7 -	
a	R f f34	gav liv	MXB 24m25		no dre	P=1.	
290	R m f34	gav mul	mnl 24m25	:	#2.42mg \	P<.02 -	
a	R m f34	gav pta	MXA 24m25	±	3.30mg \	P<.02	
b	R m f34	gav pta	adm 24m25		3.56mg \	P<.03	
c	R m f34	gav TBA	MXB 24m25		1.78mg \	P<.02	
d	R m f34	gav liv	MXB 24m25		12.4mg \	P<.2	
THENYLDIAMINE							
291	R f f34	wat tyf	mix 19m30 e		>	10.7gm	P<1. -
a	R f f34	wat liv	mix 19m30 e			no dre	P=1. -
292	R m f34	wat liv	mix 19m30 e		>	96.8mg	P<.4 -
a	R m f34	wat tyf	mix 19m30 e			no dre	P=1. -
THIABENDAZOLE							
293	R f f3d	eat ubl	mix 65w65 er		>	no dre	P=1.
294	R m f3d	eat ubl	mix 65w65 er		>	no dre	P=1.
a	R m f3d	eat ubl	tcc 65w65 er			no dre	P=1.
TILIDINE FUMARATE							
295	M f cf1	eat lun	agc 80w80 e		100ng...:..1ug....:..10....:..100....:..1mg....:..10....:..100....:..1g....:..10	207. mg *	P<.02 -
a	M f cf1	eat liv	hpa 80w80 e			no dre	P=1. -
b	M f cf1	eat tba	mix 80w80 e			643. mg *	P<.7 -
c	M f cf1	eat tba	mal 80w80 e			970. mg *	P<.8 -
d	M f cf1	eat tba	ben 80w80 e			1.48gm *	P<.7 -
296	M m cf1	eat lun	agc 80w80 e			936. mg *	P<.6 -
a	M m cf1	eat liv	hem 80w80 e			2.72gm Z	P<.6 -
b	M m cf1	eat hpa	80w80 e			no dre	P=1. -
c	M m cf1	eat tba	mix 80w80 e			249. mg *	P<.3 -
d	M m cf1	eat tba	mal 80w80 e			391. mg *	P<.4 -
e	M m cf1	eat tba	ben 80w80 e			no dre	P=1. -
297	R f wal	eat liv	hpa 24m24 e			476. mg *	P<.003 -
a	R f wal	eat tba	mal 24m24 e			525. mg *	P<.2 -
b	R f wal	eat tba	ben 24m24 e			no dre	P=1. -
c	R f wal	eat tba	mix 24m24 e			no dre	P=1. -
298	R m wal	eat liv	hpa 24m24 e		>	11.3gm *	P<1. -
a	R m wal	eat tba	mix 24m24 e			122. mg *	P<.02 -
b	R m wal	eat tba	ben 24m24 e			300. mg *	P<.2 -
c	R m wal	eat tba	mal 24m24 e			537. mg *	P<.2 -
TOLUENE***							
299	R f sda	gav tba	mal 24m33 e		100ng...:..1ug....:..10....:..100....:..1mg....:..10....:..100....:..1g....:..10	. + .	578. mg P<.002 +
300	R m sda	gav tba	mal 24m33 e			. ± .	940. mg P<.05 +
TOLUENE DIISOCYANATE, COMMERCIAL GRADE (2,4 (80%) AND 2,6 (20%))							
301	M f b6c	gav	MXB MXB 24m25		: + :	181. mg /	P<.0005
a	M f b6c	gav	liv MXA 24m25			215. mg /	P<.008
b	M f b6c	gav	liv hpa 24m25			250. mg /	P<.005 c
c	M f b6c	gav	MXA MXA 24m25			580. mg *	P<.008 c
d	M f b6c	gav	MXA MXA 24m25			1.20gm *	P<.04
e	M f b6c	gav	TBA MXB 24m25			305. mg *	P<.5
f	M f b6c	gav	liv MXB 24m25			215. mg /	P<.008
g	M f b6c	gav	lun MXB 24m25			815. mg *	P<.3
302	M m b6c	gav	TBA MXB 24m25			253. mg *	P<.3 -
a	M m b6c	gav	liv MXB 24m25			no dre	P=1.
b	M m b6c	gav	lun MXB 24m25			1.92gm *	P<.5
303	R f f34	gav	MXB MXB 25m25		: + :	25. 4mg *	P<.0005
a	R f f34	gav	mgl fba 25m25			33. 4mg *	P<.0005c
b	R f f34	gav	liv nnd 25m25			92. 2mg *	P<.0005c
c	R f f34	gav	pni MXA 25m25			115. mg *	P<.0005
d	R f f34	gav	pni isa 25m25			135. mg *	P<.002 c
e	R f f34	gav	adr pha 25m25			143. mg *	P<.007
f	R f f34	gav	adr coa 25m25			174. mg *	P<.007
g	R f f34	gav	sub fib 25m25			256. mg *	P<.004
h	R f f34	gav	pit cra 25m25			77. 3mg *	P<.03
i	R f f34	gav	pit MXA 25m25			86. 9mg *	P<.05
j	R f f34	gav	sub MXA 25m25			206. mg /	P<.02 c
k	R f f34	gav	cli adm 25m25			260. mg *	P<.03
l	R f f34	gav	TBA MXB 25m25			25. 1mg *	P<.0005
m	R f f34	gav	liv MXB 25m25			92. 2mg *	P<.0005
304	R m f34	gav	tes MXA 25m25			13. 6mg *	P<.002
a	R m f34	gav	MXB MXB 25m25			27. 3mg *	P<.0005
b	R m f34	gav	sub MXA 25m25			34. 1mg *	P<.0005c
c	R m f34	gav	pan ana 25m25			51. 6mg *	P<.0005c

Spe	Strain	Site	Xpo+Xpt	TD50	2Tailpvl
Sex	Route	Hist	Notes	DR	AuOp
d	R m	f34 gav sub fib	25m25	56.0mg *	P<.0005
e	R m	f34 gav pit cra	25m25	76.4mg *	P<.005
f	R m	f34 gav sub fbs	25m25	92.4mg *	P<.002
g	R m	f34 gav pit MXA	25m25	83.7mg *	P<.02
h	R m	f34 gav sub MXA	25m25	103.0mg *	P<.02
i	R m	f34 gav pni MXA	25m25	201.0mg *	P<.03
j	R m	f34 gav TBA MXB	25m25	18.4mg *	P<.002
k	R m	f34 gav liv MXB	25m25	196.0mg *	P<.4
TRICHLOROETHYLENE***					
			<u>100ng.....1ug.....10.....100.....1mg.....100.....1g.....10</u>		
305	M f	b6c inh lun tum	18m36 e	. +	6.32gm * P<.002 +
a	M f	b6c inh liv hpt	18m36 e		13.6gm * P<.06 +
b	M f	b6c inh thy car	18m36 e		131.0gm * P<.2
c	M f	b6c inh thy ade	18m36 e		2.23kg * P<1.
d	M f	b6c inh tba mix	18m36 e		1.32gm * P<.002
e	M f	b6c inh tba mal	18m36 e		2.08gm * P<.02
306	M m	b6c inh liv hpt	18m36 es	. +	5.03gm * P<.006 +
a	M m	b6c inh lun tum	18m36 es		no dre P=1.
b	M m	b6c inh thy ade	18m36 es		no dre P=1.
c	M m	b6c inh tba mal	18m36 es		no dre P=1.
d	M m	b6c inh tba mix	18m36 es		no dre P=1.
307	M m	b6c inh liv hpt	18m31 e	.>	4.53gm * P<.3 +
a	M m	b6c inh liv ang	18m31 e		77.0gm * P<.8
b	M m	b6c inh lun tum	18m31 e		no dre P=1.
c	M m	b6c inh tba mal	18m31 e		no dre P=1.
d	M m	b6c inh tba mix	18m31 e		no dre P=1.
308	M f	swi inh lun tum	18m34 e	.>	35.4gm * P<.7
a	M f	swi inh liv hpt	18m34 e		121.0gm * P<.2
b	M f	swi inh tba mix	18m34 e		9.19gm * P<.6
c	M f	swi inh tba mal	18m34 e		9.84gm * P<.5
309	M m	swi inh liv hpt	18m34 e	. +	3.91gm * P<.003 +
a	M m	swi inh lun tum	18m34 e		10.1gm * P<.3 +
b	M m	swi inh tba mal	18m34 e		6.32gm * P<.08
c	M m	swi inh tba mix	18m34 e		8.07gm * P<.3
310	R f	sda gav mgl mix	12m33 e	.>	no dre P=1.
a	R f	sda gav kid mix	12m33 e		no dre P=1.
b	R f	sda gav --- leu	12m33 e		no dre P=1.
c	R f	sda gav liv mix	12m33 e		no dre P=1.
d	R f	sda gav tba mix	12m33 e		no dre P=1.
e	R f	sda gav tba mal	12m33 e		no dre P=1.
311	R f	sda inh liv ang	24m37 e	.>	8.01gm * P<.3
a	R f	sda inh kid uac	24m37 e		43.2gm * P<.2
b	R f	sda inh --- leu	24m37 e		no dre P=1.
c	R f	sda inh liv hpt	24m37 e		no dre P=1.
d	R f	sda inh tba mix	24m37 e		3.89gm * P<.8
e	R f	sda inh tba mal	24m37 e		6.23gm Z P<.6
f	R f	sda inh tba mal	24m37 e		6.23gm Z P<.6
312	R f	sda inh --- leu	24m37 e	. ±	2.85gm * P<.09
a	R f	sda inh liv nnd	24m37 e		9.68gm * P<.07
b	R f	sda inh liv hpt	24m37 e		no dre P=1.
c	R f	sda inh tba mal	24m37 e		1.62gm * P<.2
d	R f	sda inh tba mix	24m37 e		no dre P=1.
313	R m	sda gav --- leu	12m33 e	. ±	428.0mg * P<.08
a	R m	sda gav kid mix	12m33 e		no dre P=1.
b	R m	sda gav liv mix	12m33 e		no dre P=1.
c	R m	sda gav mgl mix	12m33 e		no dre P=1.
d	R m	sda gav tba mal	12m33 e		818.0mg * P<.4
e	R m	sda gav tba mix	12m33 e		no dre P=1.
314	R m	sda inh tes ldc	24m37 e	. + .	557.0mg * P<.0005+
a	R m	sda inh kid uac	24m37 e		9.49gm * P<.03
b	R m	sda inh --- leu	24m37 e		5.93gm * P<.5
c	R m	sda inh liv nnd	24m37 e		30.7gm * P<.2
d	R m	sda inh liv ang	24m37 e		no dre P=1.
e	R m	sda inh liv hpt	24m37 e		no dre P=1.
f	R m	sda inh tba mix	24m37 e		1.88gm * P<.6
g	R m	sda inh tba mal	24m37 e		10.8gm * P<.9
315	R m	sda inh mgl tum	24m37 e	. + .	120.0mg Z P<.0005
a	R m	sda inh tes ldc	24m37 e		835.0mg * P<.02 +
b	R m	sda inh --- leu	24m37 e		2.81gm * P<.3
c	R m	sda inh kid uac	24m37 e		12.4gm * P<.2
d	R m	sda inh liv hpt	24m37 e		no dre P=1.
e	R m	sda inh tba mix	24m37 e		428.0mg * P<.2
f	R m	sda inh tba mal	24m37 e		1.94gm * P<.4

RefNum	LoConf	UpConf	Cntrl	1Dose	1Inc	2Dose	2Inc		Citation or Pathology	Brkly Code
d	c50533	25.2mg	239.mg	3/50	21.0mg	3/50	41.7mg	9/50		S
e	c50533	32.2mg	732.mg	3/50	21.0mg	4/50	41.7mg	7/50		S
f	c50533	36.9mg	421.mg	0/50	21.0mg	3/50	41.7mg	3/50		S
g	c50533	33.6mg	12.8gm	4/50	21.0mg	4/50	41.7mg	7/50		pit:cra,crc. S
h	c50533	39.2mg	n.s.s.	1/50	21.0mg	4/50	41.7mg	3/50		sub:fbs,ost,scr. S
i	c50533	57.7mg	n.s.s.	1/50	21.0mg	0/50	41.7mg	4/50		pni:isa,isc. S
j	c50533	9.29mg	94.4mg	40/50	21.0mg	24/50	41.7mg	29/50		
k	c50533	42.4mg	n.s.s.	7/50	21.0mg	3/50	41.7mg	4/50		liv:hpa,hpc,nnd.
TRICHLOROETHYLENE*** (TCE) 79-01-6										
305	bt306m	3.33gm	28.9gm	2/90	99.8mg	6/90	299.mg	7/89	599.mg	14/87
a	bt306m	5.28gm	n.s.s.	3/88	99.8mg	4/89	299.mg	4/88	599.mg	9/85
b	bt306m	21.4gm	n.s.s.	0/90	99.8mg	0/90	299.mg	0/89	599.mg	1/87
c	bt306m	17.3gm	n.s.s.	1/90	99.8mg	1/90	299.mg	1/89	599.mg	1/87
d	bt306m	700.mg	6.89gm	51/90	99.8mg	58/90	299.mg	60/89	599.mg	69/87
e	bt306m	986.mg	n.s.s.	42/90	99.8mg	52/90	299.mg	53/89	599.mg	58/87
306	bt306m	2.22gm	59.8gm	1/59	83.2mg	1/31	250.mg	3/38	499.mg	6/37
a	bt306m	12.3gm	n.s.s.	1/85	83.2mg	2/86	250.mg	2/88	499.mg	1/88
b	bt306m	2.17gm	n.s.s.	0/85	83.2mg	0/86	250.mg	0/88	499.mg	0/88
c	bt306m	8.59gm	n.s.s.	9/85	83.2mg	3/86	250.mg	3/88	499.mg	7/88
d	bt306m	7.93gm	n.s.s.	11/85	83.2mg	4/86	250.mg	5/88	499.mg	8/88
307	bt306n	1.34gm	n.s.s.	17/77	94.9mg	19/47	285.mg	27/67	569.mg	21/63
a	bt306n	6.47gm	n.s.s.	1/77	94.9mg	1/47	285.mg	3/67	569.mg	1/63
b	bt306n	7.94gm	n.s.s.	12/90	94.9mg	6/89	285.mg	7/90	569.mg	7/90
c	bt306n	3.14gm	n.s.s.	40/90	94.9mg	27/89	285.mg	34/90	569.mg	31/90
d	bt306n	994.mg	n.s.s.	51/90	94.9mg	30/89	285.mg	46/90	(569.mg)	36/90
308	bt305	4.57gm	n.s.s.	15/88	106.mg	12/89	318.mg	12/88	636.mg	16/88
a	bt305	19.8gm	n.s.s.	0/84	106.mg	0/89	318.mg	0/86	636.mg	1/86
b	bt305	1.70gm	n.s.s.	54/90	106.mg	43/89	318.mg	46/90	636.mg	54/89
c	bt305	2.32gm	n.s.s.	36/90	106.mg	27/89	318.mg	30/90	636.mg	38/89
309	bt305	1.98gm	22.7gm	4/66	88.4mg	2/53	265.mg	8/59	530.mg	13/61
a	bt305	3.02gm	n.s.s.	10/78	88.4mg	5/73	265.mg	12/78	530.mg	12/74
b	bt305	2.45gm	n.s.s.	10/88	88.4mg	13/89	265.mg	15/89	530.mg	19/90
c	bt305	2.23gm	n.s.s.	23/88	88.4mg	17/89	265.mg	27/89	530.mg	26/90
310	bt301	98.3mg	n.s.s.	16/30	11.9mg	22/30	59.7mg	16/29		
a	bt301	106.mg	n.s.s.	0/30	11.9mg	0/29	59.7mg	0/26		
b	bt301	109.mg	n.s.s.	1/30	11.9mg	0/30	59.7mg	0/26		
c	bt301	111.mg	n.s.s.	0/30	11.9mg	0/30	59.7mg	0/29		
d	bt301	98.1mg	n.s.s.	18/30	11.9mg	23/30	59.7mg	17/29		
e	bt301	297.mg	n.s.s.	7/30	11.9mg	4/30	59.7mg	4/29		
311	bt304m	1.30gm	n.s.s.	0/17	30.7mg	0/4	92.1mg	0/26	184.mg	1/14
a	bt304m	7.03gm	n.s.s.	0/101	30.7mg	0/89	92.1mg	0/88	184.mg	1/88
b	bt304m	3.56gm	n.s.s.	7/105	30.7mg	6/90	92.1mg	0/90	184.mg	7/90
c	bt304m	6.53gm	n.s.s.	0/81	30.7mg	1/63	92.1mg	0/63	184.mg	0/70
d	bt304m	406.mg	n.s.s.	84/105	30.7mg	60/90	92.1mg	72/90	184.mg	69/90
e	bt304m	1.10gm	n.s.s.	38/105	30.7mg	17/90	92.1mg	21/90	184.mg	32/90
f	bt304m	1.10gm	n.s.s.	38/105	30.7mg	17/90	92.1mg	21/90	184.mg	32/90
312	bt304n	1.01gm	n.s.s.	0/40	30.7mg	3/40	92.1mg	2/40	184.mg	4/40
a	bt304n	2.38gm	n.s.s.	0/40	30.7mg	0/40	92.1mg	0/40	184.mg	2/40
b	bt304n	269.mg	n.s.s.	0/28	30.7mg	0/26	92.1mg	0/31	184.mg	0/29
c	bt304n	532.mg	n.s.s.	9/40	30.7mg	12/40	92.1mg	8/40	184.mg	16/40
d	bt304n	312.mg	n.s.s.	35/40	30.7mg	28/40	92.1mg	26/40	184.mg	33/40
313	bt301	162.mg	n.s.s.	0/25	11.9mg	2/28	59.7mg	3/25		
a	bt301	87.1mg	n.s.s.	0/22	11.9mg	0/24	59.7mg	0/21		
b	bt301	108.mg	n.s.s.	0/28	11.9mg	0/29	59.7mg	0/30		
c	bt301	363.mg	n.s.s.	1/28	11.9mg	4/29	59.7mg	1/30		
d	bt301	177.mg	n.s.s.	1/28	11.9mg	4/29	59.7mg	4/30		
e	bt301	191.mg	n.s.s.	7/28	11.9mg	8/29	59.7mg	7/30		
314	bt304m	336.mg	1.44gm	5/81	21.5mg	11/73	64.5mg	24/71	129.mg	22/76
a	bt304m	2.87gm	n.s.s.	0/87	21.5mg	0/86	64.5mg	0/80	129.mg	3/85
b	bt304m	1.17gm	n.s.s.	6/95	21.5mg	10/90	64.5mg	11/90	129.mg	9/89
c	bt304m	4.99gm	n.s.s.	0/95	21.5mg	0/90	64.5mg	0/90	129.mg	1/89
d	bt304m	40.5mg	n.s.s.	1/22	21.5mg	0/5	64.5mg	0/9	129.mg	0/9
e	bt304m	4.36gm	n.s.s.	1/71	21.5mg	0/62	64.5mg	1/63	129.mg	0/62
f	bt304m	329.mg	n.s.s.	69/95	21.5mg	54/90	64.5mg	55/90	129.mg	65/89
g	bt304m	789.mg	n.s.s.	31/95	21.5mg	25/90	64.5mg	26/90	129.mg	29/89
315	bt304n	56.2mg	348.mg	0/36	21.5mg	9/36	(64.5mg)	7/39	129.mg	10/39
a	bt304n	375.mg	n.s.s.	1/33	21.5mg	5/32	64.5mg	6/36	129.mg	9/37
b	bt304n	755.mg	n.s.s.	3/39	21.5mg	3/40	64.5mg	3/40	129.mg	6/40
c	bt304n	2.01gm	n.s.s.	0/33	21.5mg	0/32	64.5mg	0/36	129.mg	1/37
d	bt304n	2.59gm	n.s.s.	1/28	21.5mg	1/23	64.5mg	0/27	129.mg	0/32
e	bt304n	154.mg	n.s.s.	21/39	21.5mg	26/40	64.5mg	27/40	129.mg	29/40
f	bt304n	466.mg	n.s.s.	8/39	21.5mg	11/40	64.5mg	7/40	129.mg	13/40

Spe	Strain	Site	Xpo:Xpt		T050	2Tailpvl
Sex	Route	Hist	Notes		DR	AuOp
TRIETHANOLAMINE***						
316	R f	f3d wat	Liv nnd	24m26 ev	100ng....1ug....10....100....1mg....10....100....1g....10	>47.0gm * P<.3 -
a	R f	f3d wat	tba mix	24m26 ev		no dre P=1. -
317	R m	f3d wat	Liv nnd	24m26 e		. 49.59gm * P<.09 -
a	R m	f3d wat	Liv hpc	24m26 e		53.6gm * P<.3 -
b	R m	f3d wat	tba mix	24m26 e		no dre P=1. -
VINYL CHLORIDE***						
318	R m	wis inh	Liv ang	52w78 e	100ng....1ug....10....100....1mg....10....100....1g....10	10.2mg Z P<.0005+ 193.mg * P<.0005+
a	R m	wis inh	lun ang	52w78 e		867.mg * P<.2 +
b	R m	wis inh	lun tum	52w78 e		5.82gm * P<.8 +
c	R m	wis inh	bra tum	52w78 e		5.82gm * P<.8 +
d	R m	wis inh	ski tum	52w78 e		no dre P=1. +
e	R m	wis inh	nse tum	52w78 e		no dre P=1. +
f	R m	wis inh	tes tum	52w78 e		5.44mg Z P<.0005+
g	R m	wis inh	tba mix	52w78 e		
4-VINYLCYCLOHEXENE*						
319	M f	b6c gav	ova	MXB 24m24	100ng....1ug....10....100....1mg....10....100....1g....10	94.4mg * P<.0005 106.mg \ P<.0005c
a	M f	b6c gav	ova	mtb 24m24		309.mg * P<.0005c
b	M f	b6c gav	ova	MXA 24m24		361.mg * P<.0005c
c	M f	b6c gav	ova	gct 24m24		839.mg * P<.01
d	M f	b6c gav	MXA	MXA 24m24		1.05gm * P<.004 e
e	M f	b6c gav	arp	adr 24m24		149.mg * P<.002
f	M f	b6c gav	TBA	MXB 24m24		1.48gm * P<.08
g	M f	b6c gav	liv	MXB 24m24		19.0gm / P<.9
h	M f	b6c gav	lun	MXB 24m24		
320	M m	b6c gav	lun	MXA 24m24	: ±	#490.mg * P<.03
a	M m	b6c gav	MXA	MXA 24m24		623.mg * P<.03
b	M m	b6c gav	lun	a/a 24m24		926.mg * P<.03
c	M m	b6c gav	TBA	MXB 24m24		307.mg * P<.1
d	M m	b6c gav	liv	MXB 24m24		1.27gm * P<.6
e	M m	b6c gav	lun	MXB 24m24		490.mg * P<.03
321	R f	f34 gav	cli	MXA 24m24	: ±	#580.mg \ P<.04
a	R f	f34 gav	TBA	MXB 24m24		305.mg * P<.2
b	R f	f34 gav	liv	MXB 24m24		3.85kg P=1.
322	R m	f34 gav	tes	ict 24m24	: + :	#62.3mg * P<.0005 769.mg * P<.003
a	R m	f34 gav	ski	MXA 24m24		935.mg * P<.006
b	R m	f34 gav	ski	sap 24m24		159.mg * P<.02
c	R m	f34 gav	adr	MXA 24m24		119.mg * P<.02
d	R m	f34 gav	TBA	MXB 24m24		132.gm * P<1.
e	R m	f34 gav	liv	MXB 24m24		
VINYLDENE CHLORIDE***						
323	M f	swi inh	mgl	mix 12m29 ej	100ng....1ug....10....100....1mg....10....100....1g....10	. + . 80.9mg P<.004 +
a	M f	swi inh	lun	mix 12m29 ej		124.mg P<.09 +
b	M f	swi inh	Liv	hpt 12m29 ej		858.mg P<.4
c	M f	swi inh	Liv	ang 12m29 ej		no dre P=1.
d	M f	swi inh	tba	mix 12m29 ej		30.9mg P<.003
e	M f	swi inh	tba	mal 12m29 ej		86.1mg P<.03
324	M m	swi inh	kid	adc 12m29 ej	: + .	22.0mg P<.0005+ 59.9mg P<.02 +
a	M m	swi inh	lun	mix 12m29 ej		566.mg P<.4
b	M m	swi inh	Liv	ang 12m29 ej		no dre P=1.
c	M m	swi inh	Liv	hpt 12m29 ej		17.9mg P<.0005
d	M m	swi inh	tba	mix 12m29 ej		50.3mg P<.004
e	M m	swi inh	tba	mal 12m29 ej		847.mg P<.3
325	R f	sda inh	Liv	mix 24m35 evg		. 119.mg P<.3
a	R f	sda inh	tba	mix 24m35 evg		no dre P=1.
326	R f	sda gav	Liv	ang 12m34 e	: >	no dre P=1.
a	R f	sda gav	Liv	hpt 12m34 e		no dre P=1.
b	R f	sda gav	tba	mix 12m34 e		no dre P=1.
327	R f	sda gav	Liv	ang 12m32 e	: >	.501mg P<.2
a	R f	sda gav	tba	mix 12m32 e		no dre P=1.
328	R m	sda gav	Liv	ang 12m34 e	: >	no dre P=1.
a	R m	sda gav	Liv	hpt 12m34 e		no dre P=1.
b	R m	sda gav	tba	mix 12m34 e		no dre P=1.
329	R m	sda gav	Liv	mix 12m32 e	: >	no dre P=1.
a	R m	sda gav	tba	mix 12m32 e		5.32mg P<.8
330	R f	sss inh	mgl	eff 18m24 e		16.0mg * P<.04 -
a	R f	sss inh	mgl	adc 18m24 e		49.8mg \ P<.03 -
b	R f	sss inh	Liv	cho 18m24 e		no dre P=1. -
331	R m	sss inh	Liv	sar 18m24 e	: >	no dre P=1. -
XYLENE MIXTURE (m-XYLENE, o-XYLENE, p-XYLENE)						
332	R f	sda gav	tba	mal 24m33 e	: + .	524.mg P<.002 +
333	R m	sda gav	tba	mal 24m33 e	: >	1.67gm P<.3 +

RefNum	LoConf	UpConf	Cntrl	1Dose	1Inc	2Dose	2Inc	Citation or Pathology	Brkly Code
TRIETHANOLAMINE*** 102-71-6									
316	1793	7.66gm	n.s.s.	0/50	412.mg	0/48	824.mg	1/47	MaeKawa;jtxe,19,345-357;1986
a	1793	1.31gm	n.s.s.	44/50	412.mg	36/48	824.mg	34/47	
317	1793	3.44gm	n.s.s.	1/48	460.mg	2/49	920.mg	5/48	
a	1793	8.73gm	n.s.s.	0/48	460.mg	0/49	920.mg	1/48	
b	1793	173.mg	n.s.s.	48/48	460.mg	49/49	920.mg	47/48	
VINYL CHLORIDE*** 75-01-4									
318	1760	4.36mg	32.7mg	0/19	1.07mg	0/20	10.7mg	7/19 (321.mg 17/20)	Bi;eeses,10,281-289;1985/pers.comm.
a	1760	88.3mg	617.mg	0/19	1.07mg	0/20	10.7mg	2/19 321.mg 9/20	
b	1760	208.mg	n.s.s.	1/19	1.07mg	1/20	10.7mg	3/19 321.mg 4/20	
c	1760	503.mg	n.s.s.	0/19	1.07mg	0/20	10.7mg	2/19 321.mg 1/20	
d	1760	503.mg	n.s.s.	0/19	1.07mg	0/20	10.7mg	2/19 321.mg 1/20	
e	1760	469.mg	n.s.s.	1/19	1.07mg	1/20	10.7mg	2/19 321.mg 1/20	
f	1760	674.mg	n.s.s.	0/19	1.07mg	0/20	10.7mg	1/19 321.mg 0/20	
g	1760	2.63mg	15.7mg	1/19	1.07mg	1/20	10.7mg	11/19 (321.mg 19/20)	
4-VINYLCYCLOHEXENE* 100-40-3									
319	c54999	66.7mg	145.mg	1/50	142.mg	33/50	283.mg	24/50	ova:gcc,gct,mtb. C
a	c54999	65.9mg	187.mg	0/50	142.mg	25/50	(283.mg 11/50)		
b	c54999	181.mg	672.mg	1/50	142.mg	10/50	283.mg	13/50	ova:gcc,gct.
c	c54999	204.mg	888.mg	1/50	142.mg	9/50	283.mg	11/50	
d	c54999	376.mg	72.6gm	1/50	142.mg	6/50	283.mg	5/50	
e	c54999	450.mg	6.37gm	0/50	142.mg	3/50	283.mg	4/50	
f	c54999	77.9mg	802.mg	28/50	142.mg	47/50	283.mg	30/50	
g	c54999	506.mg	n.s.s.	1/50	142.mg	3/50	283.mg	3/50	
h	c54999	799.mg	n.s.s.	6/50	142.mg	1/50	283.mg	4/50	
320	c54999	206.mg	n.s.s.	4/50	142.mg	11/50	283.mg	4/50	
a	c54999	245.mg	n.s.s.	4/50	142.mg	7/50	283.mg	5/50	mln:mlh; mul:mlh; mln,mlp; spl:mlm. S
b	c54999	347.mg	n.s.s.	1/50	142.mg	4/50	283.mg	3/50	S
c	c54999	112.mg	n.s.s.	26/50	142.mg	33/50	283.mg	12/50	
d	c54999	216.mg	n.s.s.	18/50	142.mg	20/50	283.mg	6/50	
e	c54999	206.mg	n.s.s.	4/50	142.mg	11/50	283.mg	4/50	
321	c54999	199.mg	n.s.s.	1/50	141.mg	5/50	(280.mg 0/50)		
a	c54999	98.8mg	n.s.s.	38/50	141.mg	37/50	280.mg	18/50	
b	c54999	766.mg	n.s.s.	1/50	141.mg	2/50	280.mg	0/50	
322	c54999	34.7mg	166.mg	35/50	141.mg	30/50	280.mg	29/50	
a	c54999	265.mg	4.36gm	0/50	141.mg	1/50	280.mg	4/50	ski:sqc,sqp. S
b	c54999	287.mg	12.5gm	0/50	141.mg	1/50	280.mg	3/50	S
c	c54999	66.5mg	n.s.s.	17/50	141.mg	16/50	280.mg	8/50	
d	c54999	51.9mg	n.s.s.	38/50	141.mg	31/50	280.mg	19/50	
e	c54999	477.mg	n.s.s.	1/50	141.mg	1/50	280.mg	0/50	liv:hpa,hpc,nnd.
VINYLDENE CHLORIDE*** 75-35-4									
323	bt402n	38.9mg	578.mg	1/89	7.72mg	12/118			Maltoni;aric,3,1-229;1985/1977
a	bt402n	46.6mg	n.s.s.	3/89	7.72mg	11/119			
b	bt402n	140.mg	n.s.s.	0/78	7.72mg	1/111			
c	bt402n	178.mg	n.s.s.	2/77	7.72mg	1/109			
d	bt402n	16.5mg	179.mg	14/89	7.72mg	41/119			
e	bt402n	38.1mg	n.s.s.	3/90	7.72mg	14/120			
324	bt402n	13.6mg	38.7mg	0/66	6.43mg	25/98			
a	bt402n	28.3mg	n.s.s.	3/87	6.43mg	16/120			
b	bt402n	92.2mg	n.s.s.	0/60	6.43mg	1/88			
c	bt402n	94.4mg	n.s.s.	2/62	6.43mg	2/92			
d	bt402n	11.1mg	39.7mg	9/87	6.43mg	45/120			
e	bt402n	25.3mg	350.mg	3/90	6.43mg	18/120			
325	bt4002	138.mg	n.s.s.	0/22	23.3mg	1/26			Maltoni;aric,3,1-229;1985
a	bt4002	33.9mg	n.s.s.	35/60	23.3mg	37/54			
326	bt403	1.05mg	n.s.s.	1/7	1.14mg	0/4	2.27mg	0/7 4.55mg 0/2	
a	bt403	6.94mg	n.s.s.	1/7	1.14mg	0/4	2.27mg	1/6 4.55mg 0/2	
b	bt403	19.2mg	n.s.s.	63/99	1.14mg	32/50	2.27mg	28/50 4.55mg 25/48	
327	bt404	80.1ug	n.s.s.	0/10	.123mg	1/4			
a	bt404	.305mg	n.s.s.	38/74	.123mg	23/47			
328	bt403	.702mg	n.s.s.	0/17	1.14mg	0/2	2.27mg	0/6 4.55mg 0/3	
a	bt403	.702mg	n.s.s.	0/17	1.14mg	0/2	2.27mg	0/6 4.55mg 0/3	
b	bt403	42.7mg	n.s.s.	29/100	1.14mg	11/49	2.27mg	9/48 4.55mg 9/49	
329	bt404	.303mg	n.s.s.	0/6	.123mg	0/7			
a	bt404	.466mg	n.s.s.	13/68	.123mg	10/47			
330	1799	6.68mg	n.s.s.	64/84	5.30mg	68/86	16.1mg	74/84	Quast;feat,6,105-144;1986
a	1799	19.4mg	n.s.s.	1/84	5.30mg	7/86	(16.1mg 4/84)		
b	1799	214.mg	n.s.s.	0/84	5.30mg	1/86	16.1mg	0/84	
331	1799	49.0mg	n.s.s.	1/86	3.71mg	0/85	11.3mg	0/86	
XYLENE MIXTURE (m-XYLENE, o-XYLENE, p-XYLENE) (CAS# 108-38-3, 95-47-6, and 106-42-3) mixture									
332	bt904	262.mg	2.26gm	10/49	237.mg	22/40			Maltoni;ajim,7,415-446;1985
333	bt904	483.mg	n.s.s.	11/45	237.mg	14/38			

Spe	Strain	Site	Xpo+Xpt		TD50	2Tailpvl
Sex	Route	Hist	Notes		DR	AuOp
XYLENE MIXTURE (60% m-XYLENE, 9% o-XYLENE, 14% p-XYLENE, 17% ETHYLBENZENE)			10.....:..100.....:..1g.....:..10		
334	M f	b6c gav	thy fca	24m24	:	#4.79gm * P<.04 -
a	M f	b6c gav	TBA MXB	24m24		no dre P=1.
b	M f	b6c gav	liv MXB	24m24		7.04gm * P<.4
c	M f	b6c gav	lun MXB	24m24		5.13gm * P<.3
335	M m	b6c gav	TBA MXB	24m24	:>	no dre P=1. -
a	M m	b6c gav	liv MXB	24m24		no dre P=1.
b	M m	b6c gav	lun MXB	24m24		7.60gm * P<.6
336	R f	f34 gav	mgl adn	24m24	:	#4.11gm * P<.04 -
a	R f	f34 gav	TBA MXB	24m24		1.93gm * P<.8
b	R f	f34 gav	liv MXB	24m24		51.3gm * P<1.
337	R m	f34 gav	TBA MXB	24m24 s	:>	700.mg * P<.5 -
a	R m	f34 gav	liv MXB	24m24 s		no dre P=1.

RefNum	LoConf	UpConf	Cntrl	1Dose	1Inc	2Dose	2Inc	Citation or Pathology	Brkly Code
XYLENE MIXTURE (60% m-XYLENE, 9% o-XYLENE, 14% p-XYLENE, 17% ETHYLBENZENE) 1330-20-7									
334	c55232	1.82gm	n.s.s.	0/50	350.mg	2/50	707.mg	3/50	S
a	c55232	636.mg	n.s.s.	41/50	350.mg	42/50	707.mg	32/50	
b	c55232	1.63gm	n.s.s.	3/50	350.mg	3/50	707.mg	5/50	liv:hpa,hpc,nnd. lun:a/a,a/c.
c	c55232	1.40gm	n.s.s.	4/50	350.mg	5/50	707.mg	7/50	
335	c55232	847.mg	n.s.s.	36/50	352.mg	37/50	707.mg	33/50	
a	c55232	1.71gm	n.s.s.	18/50	352.mg	13/50	707.mg	14/50	liv:hpa,hpc,nnd. lun:a/a,a/c.
b	c55232	1.50gm	n.s.s.	3/50	352.mg	5/50	707.mg	6/50	
336	c55232	1.24gm	n.s.s.	0/50	175.mg	0/50	354.mg	3/50	S
a	c55232	200.mg	n.s.s.	46/50	175.mg	45/50	354.mg	46/50	
b	c55232	1.40gm	n.s.s.	2/50	175.mg	2/50	354.mg	2/50	liv:hpa,hpc,nnd.
337	c55232	145.mg	n.s.s.	45/50	176.mg	45/50	354.mg	32/50	
a	c55232	1.23gm	n.s.s.	3/50	176.mg	2/50	354.mg	1/50	liv:hpa,hpc,nnd.

APPENDIX 1: CHEMICAL NAMES AND SYNONYMS IN THIS PLOT

CAS NUMBER	CHEMICAL NAME	CAS NUMBER	CHEMICAL NAME
75-07-0	ACETALDEHYDE	55-80-1	3'-METHYL-4-DIMETHYLAMINOAZOBENZENE
103-90-2	ACETAMINOPHEN	80-62-6	METHYL METHACRYLATE
53-96-3	2-ACETYLAMINOFLUORENE	70-25-7	N-METHYL-N'-NITRO-N-NITROSOGUANIDINE
79-06-1	ACRYLAMIDE	75-09-2	METHYLENE CHLORIDE
mixture	ALKYLDIMETHYLAMINE OXIDES, COMMERCIAL GRADE	70-25-7	MNNG (see N-METHYL-N'-NITRO-N-NITROSOGUANIDINE)
75104-43-7	3-AMINO-1,4-DIMETHYL-5H-PYRIDO[4,3-b]INDOLE ACETATE	24554-26-5	N-[4-(5-NITRO-2-FURYL)-2-THIAZOLYL]FORMAMIDE
77094-11-2	2-AMINO-3,4-DIMETHYLIMIDAZO[4,5-f]QUINOLINE	10024-97-2	NITROGEN OXIDE (see NITROUS OXIDE)
76180-96-6	2-AMINO-3-METHYLIMIDAZO[4,5-f]QUINOLINE	---	1-NITROSO-1-HYDROXYETHYL-3-CHLOROETHYLUREA
---	2-AMINO-3-METHYLIMIDAZO[4,5-f]QUINOLINE.HCl	13743-07-2	N-NITROSO-2-HYDROXYETHYLUREA (see 1-(2-HYDROXYETHYL)-1-NITROSOUREA)
2113-61-3	4-AMINODIPHENYL.HCl	---	1-NITROSO-1-(2-HYDROXYPROPYL)-3-CHLOROETHYLUREA
57-43-2	AMOBARBITAL	79624-33-2	NITROSO-5-METHYLOXAZOLIDONE
7177-48-2	AMPICILLIN TRIHYDRATE	39884-52-1	N-NITROSO-1,3-OXAZOLIDINE
9047-13-6	AMYLOPECTIN SULFATE	39884-52-1	NITROSOOXAZOLIDONE (see N-NITROSO-1,3-OXAZOLIDINE)
50-78-2	ASPIRIN	930-55-2	NITROSOPIRROLIDINE (see N-NITROSOPIRROLIDINE)
67-52-7	BARBITURIC ACID	930-55-2	N-NITROSOPIRROLIDINE
71-43-2	BENZENE	10024-97-2	NITROUS OXIDE
140-11-4	BENZYL ACETATE	303-47-9	OCHRATOXIN A
100-44-7	BENZYL CHLORIDE	29082-74-4	OCTACHLOROSTYRENE
25013-16-5	BHA (see BUTYLATED HYDROXYANISOLE)	143-19-1	OLEATE, SODIUM
860-22-0	FD & C BLUE NO. 2	73590-58-6	OMEPRAZOLE
7758-01-2	BROMATE, POTASSIUM	13752-51-7	OTOS (see N-OXYDIETHYLENE THIOCARBAMYL-N-OXYDIETHYLENE SULFENAMIDE)
17157-48-1	BROMOACETALDEHYDE	23135-22-0	OXAMYL
75-27-4	BROMODICHLOROMETHANE	13752-51-7	N-OXYDIETHYLENE THIOCARBAMYL-N-OXYDIETHYLENE SULFENAMIDE
---	BROMOETHANOL	2058-46-0	OXYTETRACYCLINE.HCl
123-73-9	trans-2-BUTENAL (see CROTONALDEHYDE)	103-90-2	PARACETAMOL (see ACETAMINOPHEN)
3817-11-6	BUTYL-BUTANOL-NITROSAMINE (see N-BUTYL-N-(4-HYDROXYBUTYL) NITROSAMINE)	12737-87-0	PCBs (see KANECHLOR 400)
25013-16-5	2(3)-tert-BUTYL-4-HYDROXYANISOLE (see BUTYLATED HYDROXYANISOLE)	82-68-8	PCNB (see PENTACHLORONITROBENZENE)
94-26-8	BUTYL p-HYDROXYBENZOATE	82-68-8	PENTACHLORONITROBENZENE
3817-11-6	N-BUTYL-N-(4-HYDROXYBUTYL)NITROSAMINE	50-06-6	PHENOBARBITAL
25013-16-5	BUTYLATED HYDROXYANISOLE	57-30-7	PHENOBARBITAL, SODIUM
62-54-4	CALCIUM ACETATE	50-06-6	PHENOBARBITONE (see PHENOBARBITAL)
120-80-9	CATECHOL	61-76-7	PHENYLEPHRINE.HCl
305-03-3	CHLORAMBUCIL	50-06-6	PHENYLETHYLBARBITURIC ACID (see PHENOBARBITAL)
115-28-6	CHLORENDIC ACID	132-27-4	o-PHENYLPHENATE, SODIUM
56802-99-4	CHLORINATED TRISODIUM PHOSPHATE	7803-51-2	PHOSPHINE
563-47-3	3-CHLORO-2-METHYLPROPENE, TECHNICAL GRADE (CONTAINING 5% DIMETHYLVINYL CHLORIDE)	51-03-6	PIPERONYL BUTOXIDE
100-44-7	alpha-CHLORO TOLUENE (see BENZYL CHLORIDE)	12737-87-0	POLYCHLORINATED BIPHENYLS (see KANECHLOR 400)
67-66-3	CHLOROFORM	7758-01-2	POTASSIUM BROMATE (see BROMATE, POTASSIUM)
113-92-8	CHLORPHENIRAMINE MALEATE	7447-40-7	POTASSIUM CHLORIDE
67-48-1	CHOLINE CHLORIDE	50-00-0	FORMALDEHYDE
117-10-2	CHRYSAZIN	75-09-2	FREON 30 (see METHYLENE CHLORIDE)
7681-52-9	CLOROX (see SODIUM HYPOCHLORITE)	35449-36-6	GEMCADIOL
123-73-9	CROTONALDEHYDE	548-62-9	GENTIAN VIOLET
117-10-2	DANTHRON (see CHRYSAZIN)	71277-79-7	GLYCYRRHIZINATE, DISODIUM
50-29-3	DDT	118-74-1	HCB (see HEXACHLOROBENZENE)
16338-97-9	DIALLYLNITROSAMINE	7647-01-0	HCl (see HYDROCHLORIC ACID)
35660-60-7	O,S-DIBENZOYL THIAMINE.HCl	118-74-1	HEXACHLOROBENZENE
106-93-4	1,2-DIBROMOETHANE	1415-93-6	HUMIC ACIDS, COMMERCIAL GRADE
106-46-7	1,4-DICHLOROBENZENE	302-01-2	HYDRAZINE
75-27-4	DICHLOROBROMOMETHANE (see BROMODICHLOROMETHANE)	7647-01-0	HYDROCHLORIC ACID
75-09-2	DICHLOROMETHANE (see METHYLENE CHLORIDE)	7647-01-0	HYDROGEN CHLORIDE (see HYDROCHLORIC ACID)
78-87-5	1,2-DICHLOROPROPANE	103-90-2	p-HYDROXYACETANILIDE (see ACETAMINOPHEN)
101-90-6	DIGLYCIDYL RESORCINOL ETHER, TECHNICAL GRADE	13743-07-2	1-(2-HYDROXYETHYL)-1-NITROSOUREA
68-89-3	(2,3-DIHYDRO-1,5-DIMETHYL-3-OXO-2-PHENYL-1H-PYRAZOL-4-YL) METHYLAMINO METHANESULFONATE MONOHYDRATE (see DIPYRONE)	7681-52-9	HYPOCHLOROUS ACID, SODIUM SALT (see SODIUM HYPOCHLORITE)
513-37-1	DIMETHYLVINYL CHLORIDE	860-22-0	INDIGO CARMINE (see FD & C BLUE NO. 2)
68-89-3	DIPYRONE	144-48-9	IDOACETAMIDE
106-93-4	EDB (see 1,2-DIBROMOETHANE)	76180-96-6	IQ (see 2-AMINO-3-METHYLIMIDAZO[4,5-f]QUINOLINE)
106-88-8	EPICHLOROHYDRIN	---	IQ.HCl (see 2-AMINO-3-METHYLIMIDAZO[4,5-f]QUINOLINE.HCl)
938-73-8	ETHENZAMIDE (see o-ETHOXYBENZAMIDE)	4247-02-3	ISOBUTYL p-HYDROXYBENZOATE
67-21-0	DL-ETHIONINE	12737-87-0	KANECHLOR 400
938-73-8	o-ETHOXYBENZAMIDE	301-04-2	LEAD ACETATE
140-88-5	ETHYL ACRYLATE	1335-32-6	LEAD ACETATE, BASIC
64-17-5	ETHYL ALCOHOL	1335-32-6	LEAD SUBACETATE (see LEAD ACETATE, BASIC)
16301-26-1	Z-ETHYL-O,N,N-AZoxyETHANE	---	MeIQ (see 2-AMINO-3,4-DIMETHYLIMIDAZO[4,5-f]QUINOLINE)
57497-29-7	Z-ETHYL-O,N,N-AZoxyMETHANE	531-06-6	METHAFURYLENE
100-41-4	ETHYL BENZENE	493-78-7	METHAPHENILENE
106-93-4	ETHYLENE DIBROMIDE (see 1,2-DIBROMOETHANE)	59-51-8	DL-METHIONINE
24554-26-5	FANFT (see N-[4-(5-NITRO-2-FURYL)-2-THIAZOLYL]FORMAMIDE)	563-47-3	METHYL ALLYL CHLORIDE (see 3-CHLORO-2-METHYLPROPENE, TECHNICAL GRADE (CONTAINING 5% DIMETHYLVINYL CHLORIDE))
53-96-3	FLUORENYLACETAMIDE (see 2-ACETYLAMINOFLUORENE)	57497-34-4	Z-METHYL-O,N,N-AZoxyETHANE
53-96-3	N-2-FLUORENYLACETAMIDE (see 2-ACETYLAMINOFLUORENE)		

CAS NUMBER	CHEMICAL NAME	CAS NUMBER	CHEMICAL NAME
29069-24-7	PREDNIMUSTINE	75-07-0	ACETALDEHYDE
50-24-8	PREDNISOLONE	75-09-2	METHYLENE CHLORIDE (dichloromethane, Freon 30)
79-06-1	2-PROPENAMIDE (see ACRYLAMIDE)	75-27-4	BROMODICHLOROMETHANE (dichlorobromomethane)
78-87-5	PROPYLENE DICHLORIDE (see 1,2-DICHLOROPROPANE)	75-35-4	VINYLDENE CHLORIDE
82-68-8	QUINTOZINE (see PENTACHLORONITROBENZENE)	78-87-5	1,2-DICHLOROPROPANE (propylene dichloride)
127-47-9	RETINOL ACETATE	79-01-6	TRICHLOROETHYLENE (TCE)
128-44-9	SACCHARIN, SODIUM	79-06-1	ACRYLAMIDE (2-propenamide)
7647-14-5	SODIUM CHLORIDE	80-62-6	METHYL METHACRYLATE
7758-19-2	SODIUM CHLORITE	82-68-8	PENTACHLORONITROBENZENE (PCNB)
7681-52-9	SODIUM HYPOCHLORITE	91-79-2	THIENYLDIAMINE
96-09-3	STYRENE OXIDE	94-26-8	BUTYL p-HYDROXYBENZOATE
68-89-3	SULPYRIN (see DIPYRONE)	96-09-3	STYRENE OXIDE
79-01-6	TCE (see TRICHLOROETHYLENE)	100-40-3	4-VINYLCYCLOHEXENE
96-11-5	TETRACHLORVINPHOS	100-41-4	ETHYL BENZENE
124-64-1	TETRAKIS(HYDROXYMETHYL)PHOSPHONIUM CHLORIDE	100-44-7	BENZYL CHLORIDE (alpha-chloro toluene)
55566-30-8	TETRAKIS(HYDROXYMETHYL)PHOSPHONIUM SULFATE	101-90-6	DIGLYCIDYL RESORCINOL ETHER, TECHNICAL GRADE
35449-36-6	2,2,9,9-TETRAMETHYL-1,10-DECANEDIOL (see GEMCADIOL)	102-71-6	TRIETHANOLAMINE
91-79-2	THENYLDIAMINE	103-90-2	ACETAMINOPHEN (Tylenol, paracetamol)
148-79-8	THIABENDAZOLE	106-46-7	1,4-DICHLOROBENZENE
148-79-8	2-(4-THIAZOLYL)-BENZIMAZOLE (see THIABENDAZOLE)	106-89-8	EPICHLOROHYDRIN
124-64-1	THPC (see TETRAKIS(HYDROXYMETHYL)PHOSPHONIUM CHLORIDE)	106-93-4	1,2-DIBROMOETHANE (ethylene dibromide, EDB)
55566-30-8	THPS (see TETRAKIS(HYDROXYMETHYL)PHOSPHONIUM SULFATE)	108-88-3	TOLUENE
55567-81-2	TILIDINE FUMARATE	113-92-8	CHLORPHENIRAMINE MALEATE
108-88-3	TOLUENE	115-28-6	CHLORENDIC ACID
26471-62-5	TOLUENE DIISOCYANATE, COMMERCIAL GRADE (2,4 (80%)- AND 2,6 (20%)-)	117-10-2	CHRYSAZIN (danthon)
79-01-6	TRICHLOROETHYLENE	118-74-1	HEXAChLOROBENZENE (HCB)
102-71-6	TRIETHANOLAMINE	120-80-9	CATECHOL
75104-43-7	TRP-P-1 ACETATE (see 3-AMINO-1,4-DIMETHYL-5H-PYRIDO[4,3-b]INDOLE ACETATE)	123-73-9	CROTONALDEHYDE (trans-2-butenal)
103-90-2	TYLENOL (see ACETAMINOPHEN)	124-64-1	TETRAKIS(HYDROXYMETHYL)PHOSPHONIUM CHLORIDE (THPC)
55567-81-2	VALORON (see TILIDINE FUMARATE)	127-47-9	RETINOL ACETATE
75-01-4	VINYL CHLORIDE	128-44-9	SACCHARIN, SODIUM
100-40-3	4-VINYLCYCLOHEXENE	132-27-4	o-PHENYLPHENATE, SODIUM
75-35-4	VINYLDENE CHLORIDE	140-11-4	BENZYL ACETATE
1330-20-7	XYLENE MIXTURE (60% m-XYLENE, 9% o-XYLENE, 14% p-XYLENE, 17% ETHYLBENZENE)	140-88-5	ETHYL ACRYLATE
mixture	XYLENE MIXTURE (m-XYLENE, o-XYLENE, p-XYLENE) (CAS NUMBER 108-38-3, 95-47-6, and 106-42-3)	143-19-1	OLEATE, SODIUM
		144-48-9	IODOACETAMIDE
		148-79-8	THIABENDAZOLE (2-(4-thiazolyl)-benzimazole)
		301-04-2	LEAD ACETATE
		302-01-2	HYDRAZINE
		303-47-9	OCHRATOXIN A
		305-03-3	CHLORAMBUCIL
		493-78-7	METHAPHENILENE
		513-37-1	DIMETHYLVINYL CHLORIDE
		531-06-6	METHAFURYLENE
		548-62-9	GENTIAN VIOLET
		563-47-3	3-CHLORO-2-METHYLPROPENE, TECHNICAL GRADE (CONTAINING 5% DIMETHYLVINYL CHLORIDE)
		860-22-0	FD & C BLUE NO. 2 (indigo carmine)
		930-55-2	N-NITROSOPIRROLIDINE
		938-73-8	o-ETHOXYBENZAMIDE (ethenamide)
		961-11-5	TETRACHLORVINPHOS
		1330-20-7	XYLENE MIXTURE (60% m-XYLENE, 9% o-XYLENE, 14% p-XYLENE, 17% ETHYLBENZENE)
		1335-32-6	LEAD ACETATE, BASIC
		1415-93-6	HUMIC ACIDS, COMMERCIAL GRADE
		2058-46-0	OXYTETRACYCLINE.HCl
		2113-61-3	4-AMINODIPHENYL.HCl
		3817-11-6	N-BUTYL-N-(4-HYDROXYBUTYL)NITROSAMINE (butyl-butanol-nitrosamine)
		4247-02-3	ISOBUTYL p-HYDROXYBENZOATE
		7177-48-2	AMPICILLIN TRIHYDRATE
		7447-40-7	POTASSIUM CHLORIDE
		7647-01-0	HYDROCHLORIC ACID (hydrogen chloride)
		7647-14-5	SODIUM CHLORIDE
		7681-52-9	SODIUM HYPOCHLORITE (Clorox; hypochlorous acid, sodium salt)
		7758-01-2	BROMATE, POTASSIUM
		7758-19-2	SODIUM CHLORITE
		7803-51-2	PHOSPHINE
		9047-13-6	AMYLOPECTIN SULFATE
		10024-97-2	NITROUS OXIDE (nitrogen oxide)
		12737-87-0	KANECHLOR 400 (PCBs, polychlorinated biphenyls)
		13743-07-2	1-(2-HYDROXYETHYL)-1-NITROSOUREA (N-nitroso-2-hydroxyethylurea)
		13752-51-7	N-OXYDIETHYLENE THiocarbamyl-N-OXYDIETHYLENE SULFENAMIDE (OTOS)
		16301-26-1	Z-ETHYL-O,N,N-AOXYETHANE
		16338-97-9	DIALLYLNITROSAMINE
		17157-48-1	BROMOACETALDEHYDE

APPENDIX 2: CHEMICAL NAMES IN THIS PLOT LISTED BY CAS NUMBER

CAS NUMBER	CHEMICAL NAME
mixture	ALKYLDIMETHYLAMINE OXIDES, COMMERCIAL GRADE
mixture	XYLENE MIXTURE (m-XYLENE, o-XYLENE, p-XYLENE) (CAS NUMBER 108-38-3, 95-47-6, and 106-42-3)
50-00-0	FORMALDEHYDE
50-06-6	PHENOBARBITAL (phenobarbitone)
50-24-8	PREDNISOLONE
50-29-3	DDT
50-78-2	ASPIRIN
51-03-6	PIPERONYL BUTOXIDE
53-96-3	2-ACETYLAMINOFLUORENE (N-2-fluorenylacetamide)
55-80-1	3'-METHYL-4-DIMETHYLAMINOAZOBENZENE
57-30-7	PHENOBARBITAL, SODIUM (phenobarbitone, sodium)
57-43-2	AMOBARBITAL
59-51-8	DL-METHIONINE
61-76-7	PHENYLEPHRINE.HCl
62-54-4	CALCIUM ACETATE
64-17-5	ETHYL ALCOHOL
67-21-0	DL-ETHIONINE
67-48-1	CHOLINE CHLORIDE
67-52-7	BARBITURIC ACID
67-66-3	CHLOROFORM
68-89-3	DIPYRONE (sulpyrin)
70-25-7	N-METHYL-N'-NITRO-N-NITROSOGUANIDINE (MNNG)
71-43-2	BENZENE
75-01-4	VINYL CHLORIDE

CAS NUMBER	CHEMICAL NAME
23135-22-0	OXAMYL
24554-26-5	N-[4-(5-NITRO-2-FURYL)-2-THIAZOLYL]FORMAMIDE (FANFT)
25013-16-5	BUTYLATED HYDROXYANISOLE (BHA, 2(3)-tert-butyl-4-hydroxyanisole)
26471-62-5	TOLUENE DIISOCYANATE, COMMERCIAL GRADE (2,4 (80%)- AND 2,6 (20%)-)
29069-24-7	PREDNIMUSTINE
29082-74-4	OCTACHLOROSTYRENE
35449-36-6	GEMCADIOL (2,2,9,9-tetramethyl-1,10-decanediol)
35660-60-7	O,S-DIBENZOYL THIAMINE.HCl
39884-52-1	N-NITROSO-1,3-OXAZOLIDINE (nitrosooxazolidone)
55566-30-8	TETRAKIS(HYDROXYMETHYL)PHOSPHONIUM SULFATE (THPS)
55567-81-2	TILIDINE FUMARATE (Valoron)
56802-99-4	CHLORINATED TRISODIUM PHOSPHATE
57497-29-7	Z-ETHYL-O,N,N-AZOOXYMETHANE
57497-34-4	Z-METHYL-O,N,N-AZOOXYETHANE
71277-79-7	GLYCIRRHIZINATE, DISODIUM
73590-58-6	OMEPRAZOLE
75104-43-7	3-AMINO-1,4-DIMETHYL-5H-PYRIDO[4,3-b]INDOLE ACETATE (trp-P-1 acetate)
76180-96-6	2-AMINO-3-METHYLIMIDAZO[4,5-f]QUINOLINE (IQ)
77094-11-2	2-AMINO-3,4-DIMETHYLIMIDAZO[4,5-f]QUINOLINE (MeIQ)
79624-33-2	NITROSO-5-METHYLOXAZOLIDONE
---	2-AMINO-3-METHYLIMIDAZO[4,5-f]QUINOLINE.HCl (IQ, hydrochloride salt)
---	BROMOETHANOL
---	1-NITROSO-1-(2-HYDROXYPROPYL)-3-CHLOROETHYLUREA
---	1-NITROSO-1-HYDROXYETHYL-3-CHLOROETHYLUREA

CAS NUMBER = Chemical Abstracts Service registry number

APPENDIX 3: STRAIN CODES AND DEFINITIONS

Code	Strain
aap	Alpk/Ap
aci	ACI
alb	albino
b6c	B6C3F1
bal	BALB/c
bcn	BALB/c StCrlfC3Hf/Nctr
bd9	BD IX
cb6	C57BL/6
cd1	Charles River CD1
cdf	CDF1
cdr	Charles River CD
cen	C3H/HeN
cfl	CF-1
chh	C3H/He
chm	Charles River
don	Donryu
f34	Fischer 344
f3d	F344/DuCrj
icr	ICR/Jcl
lee	Leeds albino
nmr	NMRI
osm	Osborne-Mendel
scd	Swiss CD-1
sda	Sprague-Dawley
sss	Sprague-Dawley Spartan
swi	Swiss
sww	Swiss Webster
syg	Syrian Golden
wal	Wistar albino
wis	Wistar

APPENDIX 4: ROUTE OF ADMINISTRATION CODES AND DEFINITIONS

Code	Route of Administration
eat	diet
gav	gavage
inh	inhalation
wat	water

APPENDIX 5: SITE CODES AND DEFINITIONS

Code	Site
---	all target sites
abc	abdominal cavity
adr	adrenal gland
amd	adrenal medulla
arp	adrenal capsule
auc	external auditory canal
bra	brain
cli	clitoral gland
clr	colorectum
col	colon
duo	duodenum
eso	esophagus
for	forestomach
gam	gastric mucosa
gum	gum
hag	Harderian gland
ilm	ileum
jej	jejunum
kid	kidney
ktu	kidney tubule
lab	lung/alveoli/bronchioles
lar	larynx
lgi	large intestine
liv	liver
lpp	lip
lun	lung
lyd	lymph node
mam	mammary tissue (other than or including more than mammary gland)
mey	mesentery
mgl	mammary gland
mix	more than one site; sites specified in published paper
mln	mesenteric lymph node
mul	multiple organs
MXA	more than one site, combined by NTP
MXB	more than one site, combined by Berkeley
nac	nasal mucosa
nas	nasal cavity
ncp	nasal cavity, posterior region
ner	nervous system
npc	nasal and paranasal cavity
nse	nose
orc	oral cavity
orm	oral mucosa
ova	ovary
pal	palate
pan	pancreas
phr	pharynx
pit	pituitary gland

Code	Site	Code	Histopathology
pni	pancreatic islets	coa	cortical adenoma
pre	preputial gland	cra	chromophobe adenoma
pro	prostate	crc	chromophobe carcinoma
pta	pituitary gland, anterior	epc	epidermoid carcinoma
res	respiratory system	esn	eosinophilic nodule
ski	skin	esp	endometrial stromal polyp
smi	small intestine	ess	endometrial stromal sarcoma
spd	spinal cord	fba	fibroadenoma
spl	spleen	fps	fibrosarcoma
stg	stomach, glandular	fca	follicular-cell adenoma
sto	stomach	fcc	follicular-cell carcinoma
sub	subcutaneous tissue	fib	fibroma
TBA	all tumor bearing animals, NTP	fih	fibrous histiocytoma
tba	all tumor bearing animals	gcc	granulosa-cell carcinoma
tes	testis	get	granulosa-cell tumor
thy	thyroid gland	ghc	hepatocellular carcinoma, glandular
ton	tongue	grl	granulocytic leukemia
trh	trachea	h/2	hemangioma/hemangiosarcoma
tyf	thyroid follicle	hae	hemangioendothelioma
ubl	urinary bladder	hct	hepatocellular tumor
unt	urinary tract	hem	hemangioma
ute	uterus	hes	hemangiosarcoma
vag	vagina	hga	anaplastic hemangiosarcoma
zym	Zymbal's gland	hnd	hyperplastic nodules
		hpa	hepatocellular adenoma
		hpb	hepatoblastoma
		hpc	hepatocellular carcinoma
		hph	hepatocellular hyperplastic nodule
		hpt	hepatoma
		ict	interstitial-cell tumor
		isa	islet-cell adenoma
		isc	islet-cell carcinoma
		ism	insuloma
		itm	interstitial-cell tumor, malignant
		ivc	carcinoma, invasive
		lcb	liver-cell tumor, benign
		lcc	liver-cell carcinoma
		lcm	liver-cell tumor, malignant
		ldc	Leydig-cell tumor
		leu	leukemia
		ley	leiomyoma
		lle	lymphocytic leukemia
		mal	malignant tumor
		mix	more than one tumor type; tumor types specified in published paper
		mle	monocytic leukemia
		mlh	malignant lymphoma, histiocytic type
		mlm	malignant lymphoma, mixed type
		mlp	malignant lymphoma, lymphocytic type
		mlu	malignant lymphoma, undifferentiated type
		mnl	mononuclear-cell leukemia
		mno	malignant lymphoma, NOS
		msm	mesothelioma, malignant
		mtb	mixed tumor, benign
		MXA	more than one tumor type, combined by NTP
		MXB	more than one tumor type, combined by Berkeley
		nfm	neurofibroma
		nfs	neurofibrosarcoma
		nnd	neoplastic nodule
		nsc	neurosarcoma
		ost	osteosarcoma
		pam	papilloma
		pas	papillomatosis
		pfa	parafollicular-cell adenoma
		phe	pheochromocytoma
		phm	pheochromocytoma, malignant

APPENDIX 6: HISTOPATHOLOGY CODES AND DEFINITIONS

Code	Histopathology
a/2	adenoma/adenocarcinoma
a/a	alveolar/bronchiolar adenoma
a/c	alveolar/bronchiolar carcinoma
a/t	alveolar/bronchiolar tumor
acc	acinar-cell carcinoma
acn	adenocarcinoma, NOS
adc	adenocarcinoma
ade	adenoma
adn	adenoma, NOS
adp	adenomatous polyp
adq	adenosquamous carcinoma
aff	adenofibroma/fibroadenoma
agc	alveogenic adenocarcinoma
ald	alveolar adenoma
ana	acinar-cell adenoma
ang	angiosarcoma
apc	anaplastic carcinoma
ast	astrocytoma
b/a	bronchiolar adenoma
bcc	basal-cell carcinoma
ben	benign tumor
bht	hepatocellular tumor, benign
bsn	basophilic nodule
can	carcinoma, NOS
car	carcinoma
cca	c-cell adenoma
ccn	cystadenocarcinoma, NOS
cho	cholangioma
cic	carcinoma, <i>in situ</i>
clc	cholangiocarcinoma
cnd	carcinoid

Code	Histopathology
ppa	papillary adenoma
ppn	papilloma, NOS
ppp	papillary polyp
ptm	papillary tumor
rta	reticulum-cell sarcoma, type A
sar	sarcoma
sqc	squamous-cell carcinoma
sqp	squamous-cell papilloma
srn	sarcoma, NOS
tcc	transitional-cell carcinoma
thc	hepatocellular carcinoma, trabecular
tla	tubular-cell adenoma
tpp	transitional-cell papilloma
tua	tubular adenoma
tuc	tubular carcinoma
tum	tumor or more than one tumor type; tumor types not specified in published paper
uac	tubular-cell adenocarcinoma
ule	undifferentiated leukemia
utc	urothelial carcinoma
utp	urothelial papilloma
vlp	villous polyp

APPENDIX 7: NOTECODES AND DEFINITIONS

Code	Definition
a	The exposure time reported on the plot is an average of the different exposure times of the individual dose groups in the experiment. For NCI/NTP, both exposure and experiment times have been averaged because of differential survival among the dose groups. (In the TD50 calculation for the NCI/NTP bioassays, full lifetable data have been used.)
b	Diet was specially prepared to be deficient in one or more vitamins.
e	For the general literature we have used an effective number of animals in a group whenever possible. This effective number is either: (1) the number of animals alive at the time of appearance of the first tumor, or if that is not reported, then (2) the number of animals examined.
g	Some or all of the animals were used as breeders during the course of the experiment.
j	The data for this test have been previously published in the database. The experimental results have been revised and re-published by the authors. In the database, we give the same reference number to the test in both publications.
k	For interim and serial sacrifice experiments, we have reported, as a separate experiment with a k notocode, each sacrifice time that otherwise met the inclusion rules of the database. Wherever possible, we have included unscheduled deaths with the terminal sacrifice data, and when this has been done, there is no k notocode for the terminal sacrifice experiment.

Code	Definition
r	Restricted site analysis; the authors either examined or chose to report data for only a few selected tissues.
s	Authors noted that survival was decreased due to toxicity, disease, or accidental death.
v	Variable or irregular dosing schedules have been used, e.g., dose level changed during the experiment.

APPENDIX 8: DOSE-RESPONSE CURVE SYMBOLS AND DEFINITIONS

Code	Dose-Response Curve
*	consistent with linearity
/	significant departure from linearity, upward curvature
\	significant departure from linearity, downward curvature
Z	significant departure from linearity, more than three dose groups including controls
blank	either no dose-related effect, or only two dose groups including controls, so not enough information to determine a curve shape

APPENDIX 9: REFERENCE CODES AND DEFINITIONS

Code	Reference
acpj	Acta Pathologica Japonica
ajim	American Journal of Industrial Medicine
anes	Anesthesiology
apms	Acta Pathologica et Microbiologica Scandinavica Section A. Pathology
aric	Archives of Research on Industrial Carcinogenesis
bexb	Bulletin of Experimental Biology and Medicine
bjca	British Journal of Cancer
canr	Cancer Research
carc	Carcinogenesis
clet	Cancer Letters
dact	Drug and Chemical Toxicology
dgsn	Digestion
eaes	Ecotoxicology and Environmental Safety
ejca	European Journal of Cancer and Clinical Oncology (formerly European Journal of Cancer, until 1982)
enhp	Environmental Health Perspectives
faat	Fundamental and Applied Toxicology
fctx	Food and Chemical Toxicology (formerly Food and Cosmetics Toxicology, until 1982)
gann	Japanese Journal of Cancer Research (formerly Gann through Vol 75, 1984)
jnci	Journal of the National Cancer Institute (U.S. National Cancer Institute. Journal)
jnma	Journal of the Nara Medical Association

Code	Reference
jtxe	Journal of Toxicology and Environmental Health
onco	Oncology
smon	Seminars in Oncology
tcam	Teratogenesis, Carcinogenesis, and Mutagenesis
tumo	Tumori
txap	Toxicology and Applied Pharmacology
txcy	Toxicology
txlt	Toxicology Letters
txpy	Toxicologic Pathology
zkkk	Journal of Cancer Research and Clinical Oncology (formerly Zeitschrift fur Krebsforschung und Klinische Onkologie through Vol 9, 1979)

**APPENDIX 10: NCI/NTP BIOASSAYS
EVALUATED AS INADEQUATE IN
TECHNICAL REPORTS**

Chemical Name	Experiments Evaluated as Inadequate
4-VINYLCYCLOHEXENE	rats, male mice

**APPENDIX 11:
AUTHOR'S OPINION CODES AND DEFINITIONS**

Code	Author's Opinion for Each Site
c	NTP evaluation is <i>clear evidence</i> of carcinogenic activity: studies that are interpreted as showing a dose-related (i) increase of malignant neoplasms, (ii) increase of a combination of malignant and benign neoplasms, or (iii) marked increase of benign neoplasms if there is an indication from this or other studies of the ability of such tumors to progress to malignancy.
e	NTP evaluation is <i>equivocal evidence</i> of carcinogenic activity: studies that are interpreted as showing a marginal increase of neoplasms that may be chemically related.
p	NTP evaluation is <i>some evidence</i> of carcinogenic activity: studies that are interpreted as showing a chemically related increased incidence of neoplasms (malignant, benign, or combined) in which the strength of the response is less than that required for clear evidence.
+	Author in general literature evaluated site as positive.
-	NTP evaluation is <i>no evidence</i> of carcinogenic activity: studies that are interpreted as showing no chemically related increases in malignant or benign neoplasms; or author in general literature evaluated site as negative.
blank	For NTP and general literature: all other sites.

APPENDIX 12

Bibliography: General Literature

1. Baden, J. M., Kundomai, Y. R., Lutropp, M. E., Mazze, R. I., and Kosek, J. C. Carcinogen bioassay of nitrous oxide in mice. *Anesthesiology* 64: 747-750(1986).
2. Bendele, A. M., Carlton, W. W., Krogh, P., and Lillehoj, E. B. Ochratoxin A carcinogenesis in the (C57Bl/6J × C3H)F1 mouse. *J. Nat. Cancer Inst.* 75: 733-739(1985).
3. Berger, M. R., Habs, M., and Schmahl, D. Long-term toxicology effects of prednimustine in comparison with chlorambucil, prednisolone, and chlorambucil plus prednisolone in Sprague-Dawley rats. *Seminars in Oncol.* 13: 8-13(1986).
4. Berger, M. R., Petru, E., Habs, M., and Schmahl, D. Influence of the application mode of N-[4-(5-nitro-2-furyl)-2-thiazolyl]-formamide on the localization of its carcinogenic expression in female NMRI-mice. *Cancer Lett.* 31: 311-318(1986). ip 5. Bi, W., Wang, Y., Huang, M., and Meng, D. Effect of vinyl chloride on testis in rats. *Ecotoxicol. Environ. Saf.* 10: 281-289(1985).
6. Borzelleca, J. F., and Hogan, G. K. Chronic toxicity/carcinogenicity study of FD & C Blue No. 2 in mice. *Food Chem. Toxicol.* 23: 719-722(1985).
7. Cardin, C. W., Domeyer, B. E., and Bjorkquist, L. Toxicological evaluation of commercial alkylidimethylamine oxides: two-year chronic feeding and dermal studies. *Fundam. Appl. Toxicol.* 5: 869-878(1985).
8. Cavaliere, A., Bufalari, A., and Vitali, R. Carcinogenicity and cocarcinogenicity test of phenobarbital sodium in adult BALB/c mice. *Tumori* 72: 125-128(1986).
9. Chu, I., Villeneuve, D. C., Secours, V. E., Valli, V. E., Leeson, S., and Shen, S. Y. Long-term toxicity of octachlorostyrene in the rat. *Fundam. Appl. Toxicol.* 6: 69-77(1986).
10. Chung, F., Tanaka, T., and Hecht, S. S. Induction of liver tumors in F344 rats by crotonaldehyde. *Cancer Res.* 46: 1285-1289(1986). ip 11. Diwan, B. A., Palmer, A. E., Ohshima, M., and Rice, J. M. N-nitroso-N-methylurea initiation in multiple tissues for organ-specific tumor promotion in rats by phenobarbital. *J. Nat. Cancer Inst.* 75: 1099-1105(1985).
12. Diwan, B. A., Rice, J. M., Ohshima, M., Ward, J. M., and Dove, L. F. Comparative tumor-promoting activities of phenobarbital, amobarbital, barbital sodium, and barbituric acid on livers and other organs of male F344/NCr rats following initiation with N-nitrosodiethylamine. *J. Nat. Cancer Inst.* 74: 509-516(1985).
13. Donaubauer, H. H., Kief, H., Kramer, M., Krieg, K., Mayer, D., and Schutz, E. Investigations on the carcinogenicity of dipyrone in rats. *Toxicol. Appl.*

- Pharmacol. 81: 443-451(1985).
14. Evans, J. G., Collins, M. A., Savage, S. A., Lake, B. G., and Butler, W. H. The histology and development of hepatic nodules in C3H/He mice following chronic administration of phenobarbitone. *Carcinogenesis* 7: 627-631(1986).
 15. Feron, V. J., Kruysse, A., and Woutersen, R. A. Respiratory tract tumours in hamsters exposed to acetaldehyde vapour alone or simultaneously to benzo(a)pyrene or diethylnitrosamine. *Eur. J. Cancer* 18: 13-31(1982).
 16. Fitzgerald, J. E., Petrere, J. A., McGuire, E. J., and de la Iglesia, F. A. Preclinical toxicology studies with the lipid-regulating agent gemcadiol. *Fundam. Appl. Toxicol.* 6: 520-531(1986).
 17. Flaks, B., Flaks, A., and Shaw, A. P. W. Induction by paracetamol of bladder and liver tumours in the rat. *Acta Pathol. Microbiol. Scand. Sect. A. Suppl.* 93: 367-377(1985).
 18. Fujii, T., Mikuriya, H., Kamiya, N., and Hiraga, K. Enhancing effect of thiabendazole on urinary bladder carcinogenesis induced by sodium o-phenylphenate in F344 rats. *Food Chem. Toxicol.* 24: 207-211(1986).
 19. Fukushima, S., Kurata, Y., Ogiso, T., Okuda, M., Miyata, Y., and Ito, N. Pathological analysis of the carcinogenicity of sodium o-phenylphenate and o-phenylphenol. *Oncology* 42: 304-311(1985).
 20. Gurkalo, V. K., and Vol'son, N. I. Action of vinblastine on experimental gastric carcinogenesis. *Bull. Exp. Biol. Med.* 101: 833-837(1986).
 21. Grandjean, C. J., Althoff, J., and Pour, P. M. Carcinogenicity of diallylnitrosamine following intragastric administration to Syrian hamsters. *J. Nat. Cancer Inst.* 74: 1043-1046(1985).
 22. Hagiwara, A., and Ward, J. M. The chronic hepatotoxic, tumor-promoting, and carcinogenic effects of acetaminophen in male B6C3F1 mice. *Fundam. Appl. Toxicol.* 7: 376-386(1986). ip 23. Hasegawa, R., Greenfield, R. E., Murasaki, G., Suzuki, T., and Cohen, S. M. Initiation of urinary bladder carcinogenesis in rats by freeze ulceration with sodium saccharin promotion. *Cancer Res.* 45: 1469-1473(1985).
 24. Hasegawa, R., Takahashi, M., Kokubo, T., Furukawa, F., Toyoda, K., Sato, H., Kurokawa, Y., and Hayashi, Y. Carcinogenicity study of sodium hypochlorite in F344 rats. *Food Chem. Toxicol.* 24: 1295-1302(1986).
 25. Havu, N. Enterochromaffin-like cell carcinoids of gastric mucosa in rats after life-long inhibition of gastric secretion. *Digestion* 35: 42-55(1986).
 26. Heywood, R., Wood, J. D., and Majeed, S. K. Tumorigenic and toxic effect of O,S-dibenzoyl thiamine hydrochloride in prolonged dietary administration to rats. *Toxicol. Lett.* 26: 53-58(1985).
 27. Hiasa, Y., Konishi, N., Kitahori, Y., and Shimoyama, T. Carcinogenicity study of a commercial sodium oleate in Fischer rats. *Food Chem. Toxicol.* 23: 619-623(1985).
 28. Hinderer, R. K., Lankas, G. R., Knezevich, A. L., and Auletta, C. S. The effects of long-term dietary administration of the rubber accelerator, N-oxydiethylene thiocarbamyl-N-oxydiethylene sulfenamide, to rats. *Toxicol. Appl. Pharmacol.* 82: 521-531(1986).
 29. Hiraga, K., and Fujii, T. Carcinogenicity testing of acetaminophen in F344 rats. *Jpn. J. Cancer Res.* 76: 79-85(1985).
 30. Hoos, A., Habs, M., and Schmahl, D. Comparison of liver tumor frequencies after intermittent oral administration of different doses of N-nitrosopyrrolidine in Sprague-Dawley rats. *Cancer Lett.* 26: 77-82(1985).
 31. Hoover, K. L., Hyde, C. L., Wenk, M. L., and Poirier, L. A. Ethionine carcinogenesis in CD-1, BALB/c and C3H mice. *Carcinogenesis* 7: 1143-1148(1986).
 32. Imai, S., Morimoto, J., Sekiya, N., Shima, M., Kiyozuka, Y., Nakamori, K., and Tsubura, Y. Chronic toxicity test of KCl and NaCl in F344/Slc rats. *J. Nara Med. Assoc.* 37: 115-127(1986).
 33. Imaida, K., and Wang, C. Y. Effect of sodium phenobarbital and sodium saccharin in AIN-76A diet on carcinogenesis initiated with N-[4-(5-nitro-2-furyl)-2-thiazolyl]formamide and N,N-dibutylnitrosamine in male F344 rats. *Cancer Res.* 46: 6160-6164(1986).
 34. Inai, K., Aoki, Y., Akamizu, H., Eto, R., Nishida, T., and Tokuoka, S. Tumorigenicity study of butyl and isobutyl p-hydroxybenzoates administered orally to mice. *Food Chem. Toxicol.* 23: 575-578(1985).
 35. Ishioka, T., Kuwabar, N., and Fukuda, Y. Induction of colorectal adenocarcinoma in rats by amylopectin sulfate. *Cancer Lett.* 26: 277-282(1985).
 36. Ito, N., Fukushima, S., Tamano, S., Hirose, M., and Hagiwara, A. Dose response in butylated hydroxyanisole induction of forestomach carcinogenesis in F344 rats. *J. Nat. Cancer Inst.* 77: 1261-1265(1986).
 37. Johnson, K. A., Gorzinski, S. J., Bodner, K. M., Campbell, R. A., Wolf, C. H., Friedman, M. A., and Mast, R. W. Chronic toxicity and oncogenicity study on acrylamide incorporated in the drinking water of Fischer 344 rats. *Toxicol. Appl. Pharmacol.* 85: 154-168(1986).
 38. Jorgenson, T. A., Meierhenry, E. F., Rushbrook, C. J., Bull, R. J., and Robinson, M. Carcinogenicity of chloroform in drinking water to male Osborne-Mendel rats and female B6C3F1 mice. *Fundam. Appl. Toxicol.* 5: 760-769(1985).
 39. Kasprzak, K. S., Hoover, K. L., and Poirier, L. A. Effects of dietary calcium acetate on lead subacetate carcinogenicity in kidneys of male Sprague-Dawley rats. *Carcinogenesis* 6: 279-282(1985).
 40. Kennedy Jr., G. L. Chronic toxicity, reproductive, and teratogenic studies with oxamyl. *Fundam. Appl. Toxicol.* 7: 106-118(1986).
 41. Kimura, N. T., Kanematsu, T., and Baba, T. Polychlorinated biphenyl(s) as a promoter in experimental hepatocarcinogenesis in rats. *Cancer Res.*

- Clin. Oncol. 87: 257-266(1976).
42. Kobuke, T., Inai, K., Nambu, S., Ohe, K., Takemoto, T., Matsuki, K., Nishina, H., Huang, I.-B., and Tokuoka, S. Tumorigenicity study of disodium glycyrrhizinate administered orally to mice. *Food Chem. Toxicol.* 23: 979-983(1985).
43. Koller, L. D., Kerkvliet, N. I., and Exon, J. H. Neoplasia induced in male rats fed lead acetate, ethyl urea, and sodium nitrite. *Toxicol. Pathol.* 13: 50-57(1985).
44. Kurokawa, Y., Hayashi, Y., Maekawa, A., Takahashi, M., and Kukubo, T. High incidences of pheochromocytomas after long-term administration of retinol acetate to F344/DuCrj rats. *J. Nat. Cancer Inst.* 74: 715-723(1985).
45. Kurokawa, Y., Takayama, S., Konishi, Y., Hiasa, Y., Asahina, S., Takahashi, M., Maekawa, A., and Hayashi, Y. Long-term in vivo carcinogenicity tests of potassium bromate, sodium hypochlorite, and sodium chlorite conducted in Japan. *Environ. Health Perspect.* 69: 221-235(1986).
46. LaVoie, E. J., Shigematsu, A., Mu, B., Rivenson, A., and Hoffmann, D. The effects of catechol on the urinary bladder of rats treated with N-butyl-N-(4-hydroxybutyl)nitrosamine. *Jpn. J. Cancer Res.* 76: 266-271(1985).
47. Lijinsky, W. Chronic bioassay of benzyl chloride in F344 rats and (C57BL/6J × BALB/c)F1 mice. *J. Nat. Cancer Inst.* 76: 1231-1236(1986).
48. Lijinsky, W. Rat and mouse forestomach tumors induced by chronic oral administration of styrene oxide. *J. Nat. Cancer Inst.* 77: 471-476(1986).
49. Lijinsky, W., Knutsen, G. L., and Kovatch, R. M. Carcinogenic effect of nitrosoalkylureas and nitrosoalkylcarbamates in Syrian hamsters. *Cancer Res.* 45: 542-545(1985).
50. Lijinsky, W., Kovatch, R. M., and Singer, S. S. Carcinogenesis in F-344 rats induced by nitrosohydroxyalkyl-chloroethylureas. *Cancer Res. Clin. Oncol.* 112: 221-228(1986).
51. Lijinsky, W., Saavedra, J. E., and Rueber, M. D. Organ-specific carcinogenesis in rats by methyl- and ethylazoxyalkanes. *Cancer Res.* 45: 76-79(1985).
52. Lijinsky, W., and Kovatch, R. M. Carcinogenicity studies of some analogs of the carcinogen methapyrilene in F344 rats. *Cancer Res. Clin. Oncol.* 112: 57-60(1986).
53. Littlefield, N. A., Blackwell, B.-N., Hewitt, C. C., and Gaylor, D. W. Chronic toxicity and carcinogenicity studies of gentian violet in mice. *Fundam. Appl. Toxicol.* 5: 902-912(1985).
54. Maekawa, A., Onodera, H., Furuta, K., Tanigawa, H., Ogiu, T., and Hayashi, Y. Lack of evidence of carcinogenicity of technical-grade piperonyl butoxide in F344 rats: selective induction of ileocaecal ulcers. *Food Chem. Toxicol.* 23: 675-682(1985).
55. Maekawa, A., Onodera, H., Tanigawa, H., Furuta, K., Kanno, J., Matsuoka, C., Ogiu, T., and Hayashi, Y. Lack of carcinogenicity of triethanolamine in F344 rats. *J. Toxicol. Environ. Health* 19: 345-357(1986).
56. Maltoni, C., Conti, B., Cotti, G., and Belpoggi, F. Experimental studies on benzene carcinogenicity at the Bologna Institute of Oncology: current results and ongoing research. *Am. J. Ind. Med.* 7: 415-446(1985).
57. Maltoni, C., Lefemine, G., Cotti, G., Chieco, P., and Patella, V. Experimental research on vinylidene chloride carcinogenesis. *Arch. Res. Ind. Carcinog.* 3: 1-229(1985).
58. Maltoni, C., Lefemine, G., and Cotti, G. Experimental research on trichloroethylene carcinogenesis. *Arch. Res. Ind. Carcinog.* 5: 1-393(1986).
59. Maltoni, C., and Scarnato, C. First experimental demonstration of the carcinogenic effects of benzene. *La Medicina del Lavoro* 70: 352-357(1979).
60. McGuire, E. J., DiFonzo, C. J., Martin, R. A., and de la Iglesia, F. A. Evaluation of chronic toxicity and carcinogenesis in rodents with the synthetic analgesic, tilidine fumarate. *Toxicology* 39: 149-163(1986).
61. Michejda, C. J., Kroeger-Koepke, M. B., and Kovatch, R. M. Carcinogenic effects of sequential administration of two nitrosamines in Fischer 344 rats. *Cancer Res.* 46: 2252-2256(1986).
62. Miller, R. R., Young, J. T., Kociba, R. J., Keyes, D. G., Bodner, K. M., Calhoun, L. L., and Ayres, J. A. Chronic toxicity and oncogenicity bioassay of inhaled ethyl acrylate in Fischer 344 rats and B6C3F1 mice. *Drug Chem. Toxicol.* 8: 1-42(1985).
63. Mori, H., Sugie, S., Niwa, K., Takahashi, M., and Kawai, K. Induction of intestinal tumours in rats by chrysazin. *Br. J. Cancer* 52: 781-783(1985).
64. Mori, H., Sugie, S., Niwa, K., Yoshimi, N., Tanaka, T., and Hirono, I. Carcinogenicity of chrysazin in large intestine and liver of mice. *Jpn. J. Cancer Res.* 77: 871-876(1986).
65. Naito, M., Ito, A., Watanabe, H., Kawashima, K., and Aoyama, H. Carcinogenicity of o-ethoxybenzamide in (C57BL/6N × C3H/HeN)F1 mice. *J. Nat. Cancer Inst.* 76: 115-118(1986).
66. Ogiso, T., Tatematsu, M., Tamano, S., Tsuda, H., and Ito, N. Comparative effects of carcinogens on the induction of placental glutathione S-transferase-positive liver nodules in a short-term assay and of hepatocellular carcinomas in a long-term assay. *Toxicol. Pathol.* 13: 257-265(1985).
67. Ohgaki, H., Hasegawa, H., Kato, T., Suenaga, M., Ubukata, M., Sato, S., Takayama, S., and Sugimura, T. Carcinogenicity in mice and rats of heterocyclic amines in cooked foods. *Environ. Health Perspect.* 67: 129-134(1986).
68. Ohgaki, H., Hasegawa, H., Suenaga, M., Kato, T., Sato, S., Takayama, S., and Sugimura, T. Induction of hepatocellular carcinoma and highly metastatic squamous cell carcinomas in the forestomach of mice by feeding 2-amino-3,4-dimethylimidazo[4,5-f]quinoline. *Carcinogenesis* 7: 1889-1893(1986).
69. Parker, C. M., Van Gelder, G. A., Chai, E. Y., Gellatly, J. B. M., Serota, D. G., Voelker, R. W., and Vesselinovitch, S. D. Oncogenic evaluation of

- tetrachlorvinphos in the B6C3F1 mouse. *Fundam. Appl. Toxicol.* 5: 840-854(1985).
70. Pour, P. M., Grandjean, C. J., and Knepper, S. Selective induction of nasal cavity tumors in rats by diallylnitrosamine. *Cancer Res. Clin. Oncol.* 109: 5-8(1985).
71. Quast, J. F., McKenna, M. J., Rampy, L. W., and Norris, J. M. Chronic toxicity and oncogenicity study on inhaled vinylidene chloride in rats. *Fundam. Appl. Toxicol.* 6: 105-144(1986).
72. Sakata, T., Hasegawa, R., Johansson, S. L., Zenser, T. V., and Cohen, S. M. Inhibition by aspirin of N-[4-(5-nitro-2-furyl)-2-thiazolyl]formamide initiation and sodium saccharin promotion of urinary bladder carcinogenesis in male F344 rats. *Cancer Res.* 46: 3903-3906(1986).
73. Salmon, R. J., Buisson, J. P., Zafrani, B., Aussepe, L., and Royer, R. Carcinogenic effect of 7-methoxy-2-nitro-naphthal[2,1-b]furan (R 7000) in the forestomach of rats. *Carcinogenesis* 7: 1447-1450(1986).
74. Schieferstein, G. J., Littlefield, N. A., Gaylor, D. W., Sheldon, W. G., and Burger, G. T. Carcinogenesis of 4-aminobiphenyl in BALB/cStCrlFC3Hf/Nctr mice. *Eur. J. Cancer* 21: 865-873(1985).
75. Sellakumar, A. R., Snyder, C. A., Solomon, J. J., and Albert, R. E. Carcinogenicity of formaldehyde and hydrogen chloride in rats. *Toxicol. Appl. Pharmacol.* 81: 401-406(1985).
76. Serota, D. G., Thakur, A. K., Ulland, B. M., Kirschman, J. C., Brown, N. M., Coots, R. H., and Morgareidge, K. A two-year drinking-water study of dichloromethane in rodents. I. Rats. *Food Chem. Toxicol.* 24: 951-958(1986).
77. Serota, D. G., Thakur, A. K., Ulland, B. M., Kirschman, J. C., Brown, N. M., Coots, R. H., and Morgareidge, K. A two-year drinking-water study of dichloromethane in rodents. II. Mice. *Food Chem. Toxicol.* 24: 959-963(1986).
78. Shah, A. S., Sarode, A. V., and Bhide, S. V. Experimental studies on mutagenic and carcinogenic effects of tobacco chewing. *Cancer Res. Clin. Oncol.* 109: 203-207(1985).
79. Shirai, T., Takahashi, M., Fukushima, S., and Ito, N. Marked epithelial hyperplasia of the rat glandular stomach induced by long-term administration of iodoacetamide. *Acta Pathol. Jpn.* 35: 35-43(1985).
80. Shivapurkar, N., Hoover, K. L., and Poirier, L. A. Effect of methionine and choline on liver tumor promotion by phenobarbital and DDT in diethylnitrosamine-initiated rats. *Carcinogenesis* 7: 547-550(1986).
81. Smith, A. G., Francis, J. E., Dinsdale, D., Manson, M. M., and Cabral, J. R. P. Hepatocarcinogenicity of hexachlorobenzene in rats and the sex difference in hepatic iron status and development of porphyria. *Carcinogenesis* 6: 631-636(1985).
82. Stenback, F., Mori, H., Furuya, K., and Williams, G. M. Pathogenesis of dimethylnitrosamine-induced hepatocellular cancer in hamster liver and lack of enhancement by phenobarbital. *J. Nat. Cancer Inst.* 76: 327-333(1986).
83. Styles, J., Elliott, B. M., Lefevre, P. A., Robinson, M., Pritchard, N., Hart, D., and Ashby, J. Irreversible depression in the ratio of tetraploid:diploid liver nuclei in rats treated with 3'-methyl-4-dimethylaminoazobenzene (3'M). *Carcinogenesis* 6: 21-28(1985).
84. Takayama, S., Nakatsuru, Y., Ohgaki, H., Sato, S., and Sugimura, T. Carcinogenicity in rats of a mutagenic compound, 3-amino-1,4-dimethyl-5H-pyrido[4,3-b]indole, from tryptophan pyrolysate. *Jpn. J. Cancer Res.* 76: 815-817(1985).
85. Tanaka, T., Barnes, W. S., Williams, G. M., and Weisburger, J. H. Multipotential carcinogenicity of the fried food mutagen 2-amino-3-methylimidazo[4,5-f]quinoline in rats. *Jpn. J. Cancer Res.* 76: 570-576(1985).
86. Telle, A.-M. C., de Saint Blanquat, G., Derache, R., Hollande, E., Periquet, B., and Thouvenot, J.-P. Nutritional and toxicological effects of long-term ingestion of phosphine-fumigated diet by the rat. *Food Chem. Toxicol.* 23: 1001-1009(1985).
87. Tumasonis, C. F., McMartin, D. N., and Bush, B. Lifetime toxicity of chloroform and bromodichloromethane when administered over a lifetime in rats. *Ecotoxicol. Environ. Saf.* 9: 233-240(1985).
88. Van Duuren, B. L., Melchionne, S., Seidman, I., and Pereira, M. A. Chronic bioassays of chlorinated humic acids in B6C3F1 mice. *Environ. Health Perspect.* 69: 109-117(1986).
89. Van Duuren, B. L., Seidman, I., Melchionne, S., and Kline, S. A. Carcinogenicity bioassays of bromoacetaldehyde and bromoethanol - potential metabolites of dibromoethane. *Teratog. Carcinog. Mutagen.* 5: 393-403(1985).
90. Vernot, E. H., MacEwen, J. D., Bruner, R. H., Haun, C. C., Kinkead, E. R., Prentice, D. E., Hall, A., III, Schmidt, R. E., Eason, R. L., Hubbard, G. B., and Young, J. T. Long-term inhalation toxicity of hydrazine. *Fundam. Appl. Toxicol.* 5: 1050-1064(1985).
91. Wester, P. W., van der Heijden, C. A., Bisschop, A., and van Esch, G. J. Carcinogenicity study with epichlorohydrin (CEP) by gavage in rats. *Toxicology* 36: 325-339(1985). ip 92. Woutersen, R. A., Appelman, L. M., Van Garderen-Hoetmer, A., and Feron, V. J. Inhalation toxicity of acetaldehyde in rats. III. Carcinogenicity study. *Toxicology* 41: 213-231(1986).
92. Yasui, W., and Tahara, E. Effect of gastrin on gastric mucosal cyclic adenosine 3':5'-monophosphate-dependent protein kinase activity in rat stomach carcinogenesis induced by N-methyl-N'-nitro-N-nitrosoguanidine. *Cancer Res.* 45: 4763-4767(1985).

APPENDIX 13:

**Bibliography: National Cancer Institute/
National Toxicology Program Technical Reports**

CHEMICAL NAME	TECHNICAL REPORT NUMBER	PUBLICATION DATE
AMPICILLIN TRIHYDRATE	318	1987
BENZYL ACETATE	250	1986
CHLORENDIC ACID	304	1987
CHLORINATED TRISODIUM PHOSPHATE	294	1986
3-CHLORO-2-METHYLPROPENE (TECHNICAL GRADE CONTAINING 5% DIMETHYLVINYL CHLORIDE)	300	1986
CHLORPHENIRAMINE MALEATE	317	1986
1,4-DICHLOROBENZENE	319	1987
1,2-DICHLOROPROPANE	263	1986
DIGLYCIDYL RESORCINOL ETHER (TECHNICAL GRADE)	257	1986
DIMETHYLVINYL CHLORIDE	316	1986
ETHYL ACRYLATE	259	1986
METHYL METHACRYLATE	314	1986
OXYTETRACYCLINE HYDROCHLORIDE	315	1987
PENTACHLORONITROBENZENE	325	1987
PHENYLEPHRINE HYDROCHLORIDE	322	1987
TETRAKIS(HYDROXYMETHYL)PHOSPHONIUM CHLORIDE	296	1987
TETRAKIS(HYDROXYMETHYL)PHOSPHONIUM SULFATE	296	1987
TOLUENE DIISOCYANATE, COMMERCIAL GRADE (2,4 (80%)- AND 2,6 (20%)-)	251	1986
4-VINYLCYCLOHEXENE	303	1986
XYLENES (MIXED) (60% m-, 14% p-, 9% o-, 17% ETHYLBENZENE)	327	1986

APPENDIX 14: INDEX TO CHEMICAL NAMES IN ALL PLOTS

PLOT	CAS NUMBER	CHEMICAL NAME	PLOT	CAS NUMBER	CHEMICAL NAME
3	26148-68-5	A-alpha-C (see 2-AMINO-9H-PYRIDO(2,3-b)INDOLE)	1	59-05-2	4-AMINO-N10-METHYL-PTEROYLGUTAMIC ACID (see METHOTREXATE)
4	75-07-0	ACETALDEHYDE	3	68006-83-7	2-AMINO-3-METHYL-9H-PYRIDO-[2,3-b]INDOLE
2	16568-02-8	ACETALDEHYDE METHYLFORMYLHYDRAZONE	1	72254-58-1	3-AMINO-1-METHYL-5H-PYRIDO[4,3-b]INDOLE ACETATE
1	60-35-5	ACETAMIDE	1	82-28-0	1-AMINO-2-METHYLANTHRAQUINONE
1,3,4	103-90-2	ACETAMINOPHEN	3	67730-11-4	2-AMINO-6-METHYLDIPYRIDO[1,2-a:3',2'-d]IMIDAZOLE
1	968-81-0	ACETOHEXAMIDE	3,4	76180-96-6	2-AMINO-3-METHYLMIDAZO[4,5-f]QUINOLINE
1	18523-69-8	ACETONE[4-(5-NITRO-2-FURYL)-2-THIAZOLYL]HYDRAZONE	4	---	2-AMINO-3-METHYLMIDAZO[4,5-f]QUINOLINE.HCl
2	127-06-0	ACETOXIME	1	3775-55-1	2-AMINO-5-(5-NITRO-2-FURYL)-1,3,4-OXADIAZOLE
1	34627-78-6	1'-ACETOXYSAFROLE	1	712-68-5	2-AMINO-5-(5-NITRO-2-FURYL)-1,3,4-THIADIAZOLE
1	65734-38-5	N'-ACETYL-4-(HYDROXYMETHYL)PHENYLHYDRAZINE	1,2	38514-71-5	2-AMINO-4-(5-NITRO-2-FURYL)THIAZOLE
1	1078-38-2	1-ACETYL-2-ISONICOTINOYLHYDRAZINE	3	28754-68-9	trans-5-AMINO-3[2-(5-NITRO-2-FURYL)VINYLYL]-2,4-OXADIAZOLE
1	520-45-6	3-ACETYL-6-METHYL-2,4-PYRANDIONE	1	119-34-6	4-AMINO-2-NITROPHENOL
1	114-83-0	1-ACETYL-2-PHENYLHYDRAZINE	1	2104-09-8	2-AMINO-4-(p-NITROPHENYL)THIAZOLE
1	4075-79-0	4-ACETYLAMINOBIPHENYL	1	121-66-4	2-AMINO-5-NITROTHIAZOLE
1	28314-03-6	1-ACETYLAMINOFLUORENE	1	18968-99-5	2-AMINO-5-PHENYL-2-OXAZOLIN-4-ONE + Mg(OH)2
1,2,3,4	53-96-3	2-ACETYLAMINOFLUORENE	3	26148-68-5	2-AMINO-9H-PYRIDO(2,3-b)INDOLE
1	28322-02-3	4-ACETYLAMINOFLUORENE	1	117-79-3	2-AMINOANTHRAQUINONE
1	---	ACETYLATED DIAMYLOPECTIN PHOSPHATE	1	97-56-3	o-AMINOAZOTOLUENE
1	---	ACETYLATED DISTARCH ADIPATE	1	118-92-3	AMINOBENZOIC ACID (see ANTHRANILIC ACID)
1	53123-84-5	ACETYLATED DISTARCH GLYCEROL	1	92-67-1	4-AMINOBIPHENYL (see 4-AMINODIPHENYL)
1	---	ACETYLATED DISTARCH PHOSPHATE	1	92-67-1	4-AMINODIPHENYL
1,2	3567-69-9	C.I. ACID RED 14, DISODIUM SALT (see C.I. FOOD RED 3)	4	2113-61-3	4-AMINODIPHENYL.HCl
1	7008-42-6	ACRONYCINE	1	3693-22-9	2-AMINODIPHENYLENE OXIDE
4	79-06-1	ACRYLAMIDE	3	67730-10-3	2-AMINODIPYRIDO[1,2-a:3',2'-d]IMIDAZOLE
1	107-13-1	ACRYLONITRILE	1	119-34-6	p-AMINONITROPHENOL (see 4-AMINO-2-NITROPHENOL)
1	8052-16-2	ACTINOMYCIN C	1,3	61-82-5	3-AMINOTRIAZOLE
1	50-76-0	ACTINOMYCIN D	2	2432-99-7	11-AMINOUNDECANOIC ACID
1	628-94-4	ADIPAMIDE	1,3	61-82-5	AMITROL (see 3-AMINOTRIAZOLE)
1	3688-53-7	AF-2	1	12125-02-9	AMMONIUM CHLORIDE
1	29611-03-8	AFLATOXICOL	1	3012-65-5	AMMONIUM CITRATE
1,3	1162-65-8	AFLATOXIN B1	1	1336-21-6	AMMONIUM HYDROXIDE
1	---	AFLATOXIN, CRUDE	4	57-43-2	AMOBARBITAL
2	9002-18-0	AGAR	4	7177-48-2	AMPICILLIN TRIHYDRATE
2	2757-90-6	AGARITINE (see beta-N-[gamma-L(+)-GLUTAMYL]-4-HYDROXYMETHYLPHENYLHYDRAZINE)	1	10589-74-9	1-AMYL-1-NITROSOUREA
1	101-73-5	AGERITE 150 (see p-ISOPROPOXYDIPHENYLAMINE)	2	---	1-AMYL-1-NITROSOURETHAN (see NITROSOAMYLURETHAN)
1	103-16-2	AGERITE ALBA (see HYDROQUINONE MONOBENZYL ETHER)	1	1119-68-2	n-AMYLHYDRAZINE.HCl (see n-PENTYLHYDRAZINE.HCl)
1	74-31-7	AGERITE DPPD (see DIPHENYL-p-PHENYLENEDIAMINE)	4	9047-13-6	AMYLOPECTIN SULFATE
1,2	135-88-6	AGERITE POWDER (see PHENYL-beta-NAPHTHYLAMINE)	3	104-46-1	ANETHOLE
1	93-46-9	AGERITE WHITE (see sym.-dibeta-NAPHTHYL-p-PHENYLENEDIAMINE)	1	15879-93-3	ANHYDROGLUCOCHLORAL
1	54-80-8	ALDERLIN (see PRONETHALOL)	1	101-05-3	ANILAZINE
1	51-02-5	ALDERLIN.HCl (see PRONETHALOL.HCl)	1	62-53-3	ANILINE
1	116-06-3	ALDICARB	1	142-04-1	ANILINE.HCl
1	309-00-2	ALDRIN	1	134-29-2	o-ANISIDINE.HCl
1	---	ALKYLBENZENESULFONATE, LINEAR	1	20265-97-8	p-ANISIDINE.HCl
4	mixture	ALKYLDIMETHYLAMINE OXIDES, COMMERCIAL GRADE	1	118-92-3	ANTHRANILIC ACID
3	97-59-6	ALLANTOIN	1	84-65-1	9,10-ANTHRAQUINONE
1	107-05-1	ALLYL CHLORIDE	1	28300-74-5	ANTIMONY POTASSIUM TARTRATE
2	57-06-7	ALLYL ISOTHIOCYANATE	3	518-75-2	ANTIMYCIN (see CITRININ)
3	2835-39-4	ALLYL ISOVALERATE	1	60-80-0	ANTIPYRINE (see PHENAZONE)
3	97-53-0	1-ALLYL-3-METHOXY-4-HYDROXYBENZENE (see EUGENOL)	1	86-88-4	ANTU (see 1-(NAPHTHYL)-2-THIOUREA)
1	52207-83-7	ALLYLHYDRAZINE.HCl	1	8003-03-0	APC (see ASPIRIN, PHENACETIN, AND CAFFEINE)
1	120-78-5	ALTAX (see BENZOTHIAZYL DISULFIDE)	1	140-57-8	ARAMITE
1	---	ALUMINUM POTASSIUM SULFATE	3	61-94-9	ARECOLINE.HCl
1	915-67-3	AMARANTH (see FD & C RED NO. 2)	1	27323-18-8	AROCLOR 1254
1	102-77-2	AMAX (see N-OXYDIETHYLENEBENZOTHIAZOLE-2-SULFENAMIDE)	1,3	11096-82-5	AROCLOR 1260
1	97-56-3	2-AMINO-5-AZOTOLUENE (see o-AMINOAZOTOLUENE)	1	7631-89-2	ARSENATE, SODIUM
1,4	75104-43-7	3-AMINO-1,4-DIMETHYL-5H-PYRIDO[4,3-b]INDOLE ACETATE	1	1327-53-3	ARSENIC TRIOXIDE (see ARSENIOUS OXIDE)
1	97-56-3	4-AMINO-2,3-DIMETHYLAZOBENZENE (see o-AMINOAZOTOLUENE)	1	1327-53-3	ARSENIOUS OXIDE
4	77094-11-2	2-AMINO-3,4-DIMETHYLIMIDAZO[4,5-f]QUINOLINE	1	7784-46-5	ARSENITE, SODIUM
1	17026-81-2	3-AMINO-4-ETHOXACETANILIDE	1	50-81-7	L-ASCORBIC ACID
1	6109-97-3	3-AMINO-9-ETHYLCARBAZOLE.HCl	1	22839-47-0	ASPARTAME
1	---	3-AMINO-9-ETHYLCARBAZOLE MIXTURE	1,3,4	50-78-2	ASPIRIN
1	4363-03-5	4-AMINO-3-HYDROXYBIPHENYL (see 3-HYDROXY-4-AMINOBIPHENYL)	1	8003-03-0	ASPIRIN, PHENACETIN, AND CAFFEINE
			1	1912-24-9	ATRAZINE
			1	51-55-8	ATROPINE
			1	2465-27-2	AURAMINE-O
			1	2303-16-4	AVADEX (see DIALLATE)
			1	320-67-2	5-AZACYTIDINE
			1,3	115-02-6	AZASERINE
			3	446-86-6	AZATHIOPRINE

PLOT	CAS NUMBER	CHEMICAL NAME	PLOT	CAS NUMBER	CHEMICAL NAME
1	26628-22-8	AZIDE, SODIUM	1	77-65-6	BROMODIETHYLACETYLUREA (see CARBROMAL)
1	86-50-0	AZINPHOSMETHYL	4	---	BROMOETHANOL
1	103-33-3	AZOBENZENE	1	16071-86-6	C.I. DIRECT BROWN 95
3	25843-45-2	AZOXYMETHANE	1	5351-65-5	BSH (see BENZENESULPHONOHYDRAZIDE)
4	67-52-7	BARBITURIC ACID	1	55-98-1	BUSULFAN (see MYLERAN)
1	543-80-6	BARIUM ACETATE	1	51-03-6	BUTACIDE (see PIPERONYL BUTOXIDE IN SOLVENT)
1	542-88-1	BCME (see BIS-(CHLOROMETHYL)ETHER)	3	106-99-0	1,3-BUTADIENE
1,3,4	71-43-2	BENZENE	4	123-73-9	trans-2-BUTENAL (see CROTONALDEHYDE)
1	319-84-6	alpha-BENZENE HEXACHLORIDE (see alpha-1,2,3,4,5,6-HEXACHLOROCYCLOHEXANE)	2	85-68-7	BUTYL BENZYL PHTHALATE
2	369-57-3	BENZENEDIAZONIUM TETRAFLUOROBORATE	1,3,4	3817-11-6	BUTYL-BUTANOL-NITROSAMINE (see N-BUTYL-N-(4-HYDROXYBUTYL)NITROSAMINE)
1	5351-65-5	BENZENESULPHONOHYDRAZIDE	3	109-69-3	N-BUTYL CHLORIDE
1	613-94-5	BENZYDRAZIDE (see BENZOYL HYDRAZINE)	1	88-85-7	2-sec-BUTYL-4,6-DINITROPHENOL
1	92-87-5	BENZIDINE	1	---	N,N-BUTYL-N-FORMYLHYDRAZINE
2,3	531-85-1	BENZIDINE.2HCl	2,3,4	25013-16-5	2(3)-tert-BUTYL-4-HYDROXYANISOLE (see BUTYLATED HYDROXYANISOLE)
1,2,3	50-32-8	BENZO(a)PYRENE	4	94-26-8	BUTYL p-HYDROXYBENZOATE
1	532-32-1	BENZOATE, SODIUM	1,3,4	3817-11-6	N-BUTYL-N-(4-HYDROXYBUTYL)NITROSAMINE
1	91-76-9	BENZOGUANAMINE	1	---	DI-tert-BUTYL-4-HYDROXYMETHYL PHENOL
2	119-53-9	BENZOIN	1	13010-08-7	N-BUTYL-N-NITRO-N-NITROSOGUANIDINE
1	91-64-5	1,2-BENZOPYRONE	3	869-01-2	N-N-BUTYL-N-NITROSOUREA
1	51542-33-7	1-(2'-BENZOTHIAZOLYL)-3-METHYL-3-NITROSOUREA (see N-NITROSOBENZTHIAZURON)	1	136-23-2	BUTYL ZIMATE (see ZINC DIBUTYLDITHIOCARBAMATE)
1	120-78-5	BENZOTHIAZYL DISULFIDE	2,3,4	25013-16-5	BUTYLATED HYDROXYANISOLE
1	95-14-7	1H-BENZOTRIAZOLE	1,2	128-37-0	BUTYLATED HYDROXYTOLUENE
1	613-94-5	BENZOYL HYDRAZINE	1	---	1,1-DI-N-BUTYLHYDRAZINE
1,2,3	50-32-8	BENZPYRENE (see BENZO(a)PYRENE)	1	56795-65-4	N-BUTYLHYDRAZINE.HCl
1,2,3	50-32-8	3,4-BENZPYRENE (see BENZO(a)PYRENE)	1	7422-80-2	1,2-DI-N-BUTYLHYDRAZINE.2HCl
4	140-11-4	BENZYL ACETATE	1	592-31-4	N-BUTYLUREA
4	100-44-7	BENZYL CHLORIDE	1	3068-88-0	beta-BUTYROLACTONE
1,3	1694-09-3	BENZYL VIOLET 4B (see FD & C VIOLET NO. 1)	1	75-60-5	CACODYLIC ACID (see DIMETHYLARSINIC ACID)
1	20570-96-1	BENZYLHYDRAZINE.2HCl	1	543-90-8	CADMIUM ACETATE
1	13510-49-1	BERYLLIUM SULFATE	1	35658-65-2	CADMIUM CHLORIDE MONOHYDRATE
2,3,4	25013-16-5	BHA (see BUTYLATED HYDROXYANISOLE)	1	14239-68-0	CADMIUM DIETHYLDITHIOCARBAMATE
1,2	128-37-0	BHT (see BUTYLATED HYDROXYTOLUENE)	1	7790-84-3	CADMIUM SULPHATE
1	92-52-4	BIPHENYL	1,2,3	58-08-2	CAFFINE
2	2185-92-4	2-BIPHENYLAMINE.HCl	1	8003-03-0	CAFFEINE, ASPIRIN, AND PHENACETIN (see ASPIRIN, PHENACETIN, AND CAFFEINE)
1,2	108-60-1	BIS(2-CHLORO-1-METHYLETHYL)ETHER	4	62-54-4	CALCIUM ACETATE
1	111-44-4	BIS-2-CHLOROETHYLETHER	1	156-62-7	CALCIUM CYANAMIDE (see CYANAMIDE, CALCIUM)
1	---	BIS-1,4-(CHLOROMETHOXY)BUTANE	2	105-60-2	CAPROLACTAM
1	13483-18-6	BIS-1,2-(CHLOROMETHOXY)ETHANE	3	2425-06-1	CAPTAFOL
1	---	BIS-1,6-(CHLOROMETHOXY)HEXANE	1	133-06-2	CAPTAN
1	56894-91-8	BIS-1,4-(CHLOROMETHOXY)-p-XYLENE	1	149-30-4	CAPTAX (see 2-MERCAPTOBENZOTHIAZOLE)
1	542-88-1	BIS-(CHLOROMETHYL)ETHER	1	563-41-7	CARBAMYL HYDRAZINE.HCl
1	---	4-BIS(2-HYDROXYETHYL)AMINO-2-(5-NITRO-2-THIENYL)QUINAZOLINE	1	103-03-7	1-CARBAMYL-2-PHENYLHYDRAZINE
1	58139-47-2	4-BIS(2-HYDROXYETHYL)AMINO-2-(2-THIENYL)QUINAZOLINE	1	121-59-5	CARBARONE
1	23746-34-1	BIS-2-HYDROXYETHYLIDITHIOCARBAMIC ACID, POTASSIUM	1	63-25-2	CARBARYL
1,3	53609-64-6	N-BIS(2-HYDROXYPROPYL)NITROSAMINE (see N-NITROSOBIS(2-HYDROXYPROPYL)AMINE)	2	86-74-8	CARBAZOLE
3	54143-56-5	2,5-BIS(2,2,2-TRIFLUORETHOXYL)-N-(2-PIPERIDYL)METHYL BENZAMIDE ACETATE (see FLECAINIDE ACETATE)	1,3	56-23-5	CARBON TETRACHLORIDE
1	21260-46-8	BISMATE (see BISMUTH DIMETHYLDITHIOCARBAMATE)	1,3	60391-92-6	CARBOXYMETHYLNITROSAMINE
1	21260-46-8	BISMUTH DIMETHYLDITHIOCARBAMATE	1	77-65-6	CARBROMAL
1	7787-59-9	BISMUTH OXYCHLORIDE	1,2	3567-69-9	CARMOISINE (see C.I. FOOD RED 3)
2	80-05-7	BISPHENOL A	2	9000-40-2	CAROB SEED GUM (see LOCUST BEAN GUM)
1	2519-30-4	BLACK PN	1,2	---	CARRAGEENAN, ACID-DEGRADED
1	1937-37-7	C.I. DIRECT BLACK 38	1	9000-07-1	CARRAGEENAN, NATIVE
1	2602-46-2	C.I. DIRECT BLUE 6	4	120-80-9	CATECHOL
3	2475-45-8	C.I. DISPERSE BLUE 1	1	999-81-5	CCC (see (2-CHLOROETHYL)TRIMETHYLAMMONIUM CHLORIDE)
1	3844-45-9	FD & C BLUE NO. 1	1	122-34-9	CDT (see SIMAZINE)
1,4	860-22-0	FD & C BLUE NO. 2	1	9004-32-4	CELLULOSE CARBOXYMETHYL ETHER, SODIUM (see EDIFAS B)
3	2784-94-3	HC BLUE NO. 1	1	474-25-9	CHENODEOXYCHOLIC ACID
3	33229-34-4	HC BLUE NO. 2	1	15879-93-3	alpha-CHLORALOSE (see ANHYDROGLUCOCHLORAL)
1	109-84-2	BOH (see 2-HYDROXYETHYLHYDRAZINE)	1	133-90-4	CHLORAMBEN
1	99-30-9	BOTRAN (see 2,6-DICHLORO-4-NITROANILINE)	1,4	305-03-3	CHLORAMBUCIL
1	2519-30-4	BRILLIANT BLACK BN (see BLACK PN)	1	56-75-7	CHLORAMPHENICOL
1	3844-45-9	BRILLIANT BLUE FCF (see FD & C BLUE NO. 1)	1	118-75-2	CHLORANIL
1,2	5160-02-1	BRILLIANT RED (see D & C RED NO. 9)	1	106-47-8	4-CHLORANILIC (see p-CHLOROANILINE)
1,3,4	7758-01-2	BROMATE, POTASSIUM	1,2	57-74-9	CHLORDANE
4	17157-48-1	BROMOACETALDEHYDE	1	143-50-0	CHLORDECONE (see KEPONE)
4	75-27-4	BROMODICHLOROMETHANE	4	115-28-6	CHLORENDIC ACID
			1	80-33-1	CHLORFENSON (see p-CHLOROPHENYL-p-CHLORBENZENE SULFONATE)
			3	63449-39-8	CHLORINATED PARAFFINS (C12, 60% CHLORINE)

PLOT	CAS NUMBER	CHEMICAL NAME	PLOT	CAS NUMBER	CHEMICAL NAME
3	63449-39-8	CHLORINATED PARAFFINS (C23, 43% CHLORINE)	3	52214-84-3	CIPROFIBRATE
4	56802-99-4	CHLORINATED TRISODIUM PHOSPHATE	3	518-75-2	CITRININ
1	7782-50-5	CHLORINE	1	33979-15-6	CLIVORINE
1	302-22-7	CHLORMADINONE ACETATE	1	637-07-0	CLOFIBRATE
1	101-79-1	4-CHLORO-4'-AMINODIPHENYLETHER	1	43054-45-1	CLOMIPHENE CITRATE
1	37087-94-8	2-CHLORO-5-(3,5-DIMETHYLPIPERIDINOSULPHONYL) BENZOIC ACID	1	1420-04-8	CLONITRALID
1	97-00-7	1-CHLORO-2,4-DINITROBENZENE	3	55600-34-5	CLOPHEN A 30
4	563-47-3	3-CHLORO-2-METHYLPROPENE, TECHNICAL GRADE (CONTAINING 5% DIMETHYLVINYL CHLORIDE)	1,3	11096-82-5	CLOPHEN A 60 (see AROCLOR 1260)
1	88-73-3	1-CHLORO-2-NITROBENZENE	4	7681-52-9	CLOROX (see SODIUM HYPOCHLORITE)
1	100-00-5	1-CHLORO-4-NITROBENZENE	1	107-30-2	CMME (see CHLOROMETHYL METHYL ETHER)
1	5131-60-2	4-CHLORO-m-PHENYLENEDIAMINE	1,3	60391-92-6	CMNU (see CARBOXYMETHYLNITROSUREA)
1	95-83-0	4-CHLORO-o-PHENYLENEDIAMINE	1	477-30-5	COLCEMID
1	61702-44-1	2-CHLORO-p-PHENYLENEDIAMINE SULFATE	3	65765-07-3	COMPOUND 50-892
4	100-44-7	alpha-CHLORO TOLUENE (see BENZYL CHLORIDE)	1	---	CONJUGATED EQUINE ESTROGENS (see PREMARIN)
1	95-74-9	3-CHLORO-p-TOLUIDINE	1	137-29-1	COPPER DIMETHYLDITHIOCARBAMATE
1	95-79-4	5-CHLORO-o-TOLUIDINE	1	10380-28-6	COPPER-8-HYDROXYQUINOLINE
1	3165-93-3	4-CHLORO-o-TOLUIDINE.HCl	1	56-72-4	COUMAPHOS
3	75-88-7	2-CHLORO-1,1,1-TRIFLUOROETHANE (see FLUOROCARBON 133a)	1	91-64-5	COUMARIN (see 1,2-BENZOPYRONE)
1,3	50892-23-4	[4-CHLORO-6-(2,3-XYLIDINO)-2-PYRIMIDINYLTHIO]ACETIC ACID	1	102-50-1	m-CRESIDINE
1	---	4-CHLORO-6-(2,3-XYLIDINO)-2-PYRIMIDINYLTHIO(N-beta-HYDROXYETHYL) ACETAMIDE	1	120-71-8	p-CRESIDINE
1	107-20-0	CHLOROACETALDEHYDE	4	123-73-9	CROTONALDEHYDE
1	140-49-8	4'-(CHLOROACETYL)-ACETANILIDE	1	137-29-1	CUMATE (see COPPER DIMETHYLDITHIOCARBAMATE)
1	106-47-8	p-CHLOROANILINE	1	135-20-6	CUPFERRON
3	108-90-7	CHLOROBENZENE	1	156-62-7	CYANAMIDE, CALCIUM
1	510-15-6	CHLOROBENZILATE	3	51630-58-1	CYANO-(3-PHOENOXYPHENYL)METHYL-4-CHLORO-alpha-(1-METHYLETHYL)BENZENE ACETATE (see FENVALERATE)
3	124-48-1	CHLORODIBROMOMETHANE	1	12663-46-6	CYCLOCLOLORTINE
1	54749-90-5	2-[3-(2-CHLOROETHYL)-3-NITROSOUREIDO]-D-GLUCOPYRANOSE (see CHLOROZOTOCIN)	1	95-33-0	N-CYCLOHEXYL-2-BENZOTIAZOLE SULFENAMIDE
1	999-81-5	(2-CHLOROETHYL)TRIMETHYLAMMONIUM CHLORIDE	1	4998-76-9	CYCLOHEXYLAMINE.HCl
3	593-70-4	CHLOROFLUOROMETHANE (see FLUOROCARBON 31)	1	19834-02-7	CYCLOHEXYLAMINE SULFATE
1,4	67-66-3	CHLOROFORM	1,3	50-18-0	CYCLOPHOSPHAMIDE
1	107-30-2	CHLOROMETHYL METHYL ETHER	2	16170-75-5	CYTEMBENA
1	6959-47-3	2-(CHLOROMETHYL)PYRIDINE.HCl	2	538-41-0	DAAB (see 4,4'-DIAMINOAZOBENZENE)
1	6959-48-4	3-(CHLOROMETHYL)PYRIDINE.HCl	1	60-11-7	DAB (see N,N-DIMETHYL-4-AMINOAZOBENZENE)
1	56-75-7	CHLOROMYCETIN (see CHLORAMPHENICOL)	2	785-30-8	DABA (see 4,4'-DIAMINOBENZANILIDE)
1	100-00-5	p-CHLORONITROBENZENE (see 1-CHLORO-4-NITROBENZENE)	1	4342-03-4	DACARBAZINE
1	80-33-1	p-CHLOROPHENYL-p-CHLOROBENZENE SULFONATE	1	1897-45-6	DACONIL (see CHLOROTHALONIL)
1	150-68-5	3-(p-CHLOROPHENYL)-1,1-DIMETHYLUREA	1	1596-84-5	DAMINOZIDE
1	10473-70-8	1-(4-CHLOROPHENYL)-1-PHENYL-2-PROPYNYL CARBAMATE	4	117-10-2	DANTHRON (see CHRYSAZIN)
1	2227-13-6	p-CHLOROPHENYL-2,4,5-TRICHLOROPHENYL SULFIDE	1	80-08-0	DAPSONE
1	94-20-2	1-(p-CHLOROPHENYL)SULFONYL-3-PROPYLUREA (see CHLOROPROPAMIDE)	1	58-14-0	DARAPRIN (see PYRIMETHAMINE)
1	76-06-2	CHLOROPICRIN	1	96-12-8	DBCP (see 1,2-DIBROMO-3-CHLOROPROPANE)
1	683-50-1	2-CHLOROPROPANAL	1	488-41-5	DBM (see DIBROMOMANNITOL)
1	107-05-1	CHLOROPROPENE (see ALLYL CHLORIDE)	1	91-94-1	DCB (see 3,3'-DICHLOROBENZIDINE)
1	590-21-6	1-CHLOROPROPENE	1,3	72-55-9	DCDD (see 2,7-DICHLORODIBENZO-p-DIOXIN)
1	1897-45-6	CHLOROTHALONIL	1,3,4	50-29-3	DDT
3	63449-39-8	CHLOROWAX 40 (see CHLORINATED PARAFFINS (C23, 43% CHLORINE))	1	62-73-7	DDVP (see DICHLORVOS)
3	63449-39-8	CHLOROWAX 500c (see CHLORINATED PARAFFINS (C12, 60% CHLORINE))	3	1163-19-5	DECABROMODIPHENYL OXIDE
1	54749-90-5	CHLOROZOTOCIN	1	576-68-1	DEGRANOL (see MANNITOL NITROGEN MUSTARD)
3,4	113-92-8	CHLORPHENIRAMINE MALEATE	1,3	55-18-5	DEHYDROACETIC ACID (see 3-ACETYL-6-METHYL-2,4-PYRANDIONE)
1	94-20-2	CHLORPROPAMIDE	1	625-89-8	DEN (see N-NITROSODIETHYLAMINE)
1	101-21-3	CHLORPROPHAM (see ISOPROPYL-N-(3-CHLOROPHENYL)CARBAMATE)	1	64039-27-6	6-F-DEN (see N-NITROSOBIS(2,2-TRIFLUOROETHYL)AMINE)
1	2921-88-2	CHLORPYRIFOS (see O,O-DIETHYL-O-(3,5,6-TRICHLORO-2-PYRIDYL) PHOSPHOROTHIOATE)	1	56-53-1	DES (see DIETHYLSTILBESTROL)
1	12236-46-3	CHOCOLATE BROWN FB	1	131-01-1	DESERPIDINE
1	4553-89-3	CHOCOLATE BROWN HT	3	9004-54-0	DEXTRAN
4	67-48-1	CHOLINE CHLORIDE	2,3	9011-18-1	DEXTRAN SULFATE SODIUM (DS-M-1)
1	1308-38-9	CHROMIC OXIDE PIGMENT	3	9011-18-1	DEXTRAN SULFATE SODIUM (DST-H)
1	1066-30-4	CHROMIUM (III) ACETATE	3	9011-18-1	DEXTRAN SULFATE SODIUM (KMDS-H)
4	117-10-2	CHRYSAZIN	1	---	N-1-DIACETAMIDOFLUORENE
2	87-29-6	CINNAMYL ANTHRANILATE	3	3148-73-0	DIACETYL HYDRAZINE
1	101-21-3	CIPC (see ISOPROPYL-N-(3-CHLOROPHENYL)CARBAMATE)	1	2303-16-4	DIALLATE
			3	131-17-9	DIALLYL PHTHALATE

PLOT	CAS NUMBER	CHEMICAL NAME	PLOT	CAS NUMBER	CHEMICAL NAME
3	5164-11-4	1,1-DIALLYLHYDRAZINE	1	2164-09-2	DICRYL (see 3,4'-DICHLORO-2-METHYLACRYLANILIDE)
2	---	1,2-DIALLYLHYDRAZINE.2HCl	1	1212-29-9	N,N'-DICYCLOHEXYLTHIOUREA
4	16338-97-9	DIALYLNITROSAMINE	1	81-21-0	DICYCLOPENTADIENE DIOXIDE
1	720-69-4	4,6-DIAMINO-2-(5-NITRO-2-FURYL)-6-TRIAZINE	1	60-57-1	DIELDRIN
1	39156-41-7	2,4-DIAMINOANISOLE SULFATE	1	13366-73-9	DIELDRIN, PHOTO-
2	538-41-0	4,4'-DIAMINOAZOBENZENE	1	298-18-0	D,L-DIEPOXYBUTANE
2	785-30-8	4,4'-DIAMINOBENZANILIDE	1	7316-37-2	DIETHYL-beta,gamma-EPOXYPROPYLPHOSPHONATE
1	7411-49-6	3,3'-DIAMINOBENZIDINE.4HCl (see 3,3',4,4'-TETRAAMINOBIPHENYL.4HCl)	1	7347-49-1	N,N-DIETHYL-4-(4'-PYRIDYL-1'-OXIDE)AZO)ANILINE
1	2243-62-1	1,5-DIAMINONAPHTHALENE (see 1,5-NAPHTHALENEDIAMINE)	1	2921-88-2	O,O-DIETHYL-O-(3,5,6-TRICHLORO-2-PYRIDYL)PHOSPHOROTHIOATE
1	95-80-7	2,4-DIAMINOTOLUENE	1	685-91-6	DIETHYLACETAMIDE
1	636-23-7	2,4-DIAMINOTOLUENE.2HCl	1	148-18-5	DIETHYLDITHIOCARBAMATE TRIHYDRATE, SODIUM (see SODIUM DIETHYLDITHIOCARBAMATE TRIHYDRATE)
2	15481-70-6	2,6-DIAMINOTOLUENE.2HCl	1	111-46-6	DIETHYLENE GLYCOL
1	6369-59-1	2,5-DIAMINOTOLUENE SULFATE	1	617-84-5	DIETHYLFORMAMIDE
1	333-41-5	DAZINON	1,3	55-18-5	DIETHYLNITROSAMINE (see N-NITROSODIETHYLAMINE)
1	53-70-3	DIBENZ(a,h)ANTHRACENE	1,3	55-18-5	N,N-DIETHYLNITROSAMINE (see N-NITROSODIETHYLAMINE)
1	262-12-4	DIBENZO-p-DIOXIN	1	56-53-1	DIETHYLSTILBESTROL
1	4106-66-5	3-DIBENZOFURANAMINE	1	105-55-5	N,N-DIETHYLTHIOUREA
4	35660-60-7	O,S-DIBENZOYL THIAMINE.HCl	1	628-36-4	1,2-DIFORMYLHYDRAZINE
1	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	3	21626-89-1	DITALONE
3	124-48-1	DIBROMOCHLOROMETHANE (see CHLORODIBROMOMETHANE)	4	101-90-6	DIGLYCIDYL RESORCINOL ETHER, TECHNICAL GRADE
1	10318-26-0	DIBROMODULCITOL	3,4	68-89-3	(2,3-DIHYDRO-1,5-DIMETHYL-3-OXO-2-PHENYL-1H-PYRAZOL-4-YL) METHYLAMINO METHANESULFONATE MONOHYDRATE (see DIPYRONE)
1,4	106-93-4	1,2-DIBROMOETHANE	1	33389-33-2	1,2-DIHYDRO-2-(5-NITRO-2-THIENYL)QUINAZOLIN-4-(3H)-ONE
1	488-41-5	DIBROMOMANNITOL	1	3276-41-3	3,6-DIHYDRO-2-NITROSO-2H-1,2-OXAZINE
3	3296-90-0	DIBROMONEOPENTYL GLYCOL	1,2	123-33-1	1,2-DIHYDRO-3,6-PYRIDAZINEDIONE (see MALEIC HYDRAZIDE)
2	34522-69-5	5,7-DIBROMOQUINOLINE	1	94-58-6	DIHYDROSAFROLE
1	56654-52-5	1,3-DIBUTYL-1-NITROSUREA	1	60-51-5	DIMETHOATE
1,3	924-16-3	DIBUTYLNITROSAMINE (see NITROSODIBUTYLAMINE)	1	828-00-2	DIMETHOXANE
1	1067-33-0	DIBUTYLTIN DIACETATE	1	5803-51-0	2,5-DIMETHOXY-4'-AMINOSTILBENE
1	4342-03-4	DIC (see DACARBAZINE)	1	54150-69-5	2,4-DIMETHOXYANILINE.HCl
1	117-80-6	DICHLOLONE (see 2,3-DICHLORO-1,4-NAPHTHOQUINONE)	1	91-93-0	3,3'-DIMETHOXYBENZIDINE-4,4'-DIISOCYANATE
1	51-75-2	DICHOLOREN (see NITROGEN MUSTARD)	1	1146-71-0	5,7-DIMETHOXYCYCLOCOPENTENE;c;COUMARIN
1	8001-50-1	DICHLORICIDE MOTHPROOFER (see STROBANE)	1	1150-37-4	5,7-DIMETHOXYCYCLOCOPENTENONE;2,3-c;c;COUMARIN
1	101-14-4	3,3'-DICHLORO-4,4'-DIAMINODIPHENYL METHANE (see 4,4'-METHYLENE-BIS(2-CHLORANILINE))	1	1150-42-1	5,7-DIMETHOXYCYCLOCOPENTENONE;3,2-c;c;COUMARIN
2	23950-58-5	3,5-DICHLORO(N-1,1-DIMETHYL-2-PROPYNYL)BENZAMIDE	1	60-11-7	N,N-DIMETHYL-4-AMINOAZOBENZENE
1	3883-43-0	2,3-DICHLORO-p-DIOXANE	1	57-97-6	9,10-DIMETHYL-1,2-BENZANTHRACENE (see 7,12-DIMETHYLBenz(a)ANTHRACENE)
1	87-56-9	alpha,beta-DICHLORO-beta-FORMYLACRYLIC ACID	1	3851-16-9	N,N'-DIMETHYL-N,N'-DINITROSPHTHALAMIDE
1	2164-09-2	3,4'-DICHLORO-2-METHYLACRYLANILIDE	3	868-85-9	DIMETHYL HYDROGEN PHOSPHITE
1	51-75-2	2,2'-DICHLORO-N-METHYLDIETHYLAMINE (see NITROGEN MUSTARD)	3	597-25-1	DIMETHYL MORPHOLINOPHOSPHORAMIDATE
1	117-80-6	2,3-DICHLORO-1,4-NAPHTHOQUINONE	1	59-35-8	4,6-DIMETHYL-2-(5-NITRO-2-FURYL)PYRIMIDINE
1	99-30-9	2,6-DICHLORO-4-NITROANILINE	1	551-92-8	1,2-DIMETHYL-5-NITROIMIDAZOLE
2	609-20-1	2,6-DICHLORO-p-PHENYLENEDIAMINE	1	120-61-6	DIMETHYL TEREPHTHALATE
3	7572-29-4	DICHLOROACETYLENE	2	25812-30-0	2,2-DIMETHYL-5-(2,5-XYLYLOXY)VALERIC ACID (see GEMFIBROZIL)
3	95-50-1	1,2-DICHLOROBENZENE	1	55738-54-0	trans-2-(DIMETHYLAMINO)METHYLIMINO]-5-[2-(5-NITRO-2-FURYL)VINY]-1,3,4-OXADIAZOLE
4	106-46-7	1,4-DICHLOROBENZENE	1	6120-10-1	4-DIMETHYLAMINO-3,5-XYLENOL
3	95-50-1	o-DICHLOROBENZENE (see 1,2-DICHLOROBENZENE)	1	75-60-5	DIMETHYLARSINIC ACID
1	91-94-1	3,3'-DICHLOROBENZIDINE	1	57-97-6	7,12-DIMETHYLBenz(a)ANTHRACENE
1	110-57-6	trans-1,4-DICHLOROBUTENE-2	1	79-44-7	DIMETHYLCARBAMOYL CHLORIDE (see DIMETHYLCARBAMYL CHLORIDE)
1	33857-26-0	2,7-DICHLORODIBENZO-p-DIOXIN	1	79-44-7	DIMETHYLCARBAMYL CHLORIDE
1	75-34-3	1,1-DICHLOROETHANE	1	598-64-1	DIMETHYLDITHIOCARBAMIC ACID, DIMETHYLAMINE
1	107-06-2	1,2-DICHLOROETHANE	3	1643-20-5	N,N-DIMETHYLDODECYLAMINE-N-OXIDE
3,4	75-09-2	DICHLOROMETHANE (see METHYLENE CHLORIDE)	1	57-14-7	1,1-DIMETHYLHYDRAZINE
1	120-36-5	2-(2,4-DICHLOROPHOENOXY)PROPIONIC ACID (see alpha-(2,4-DICHLOROPHOENOXY)PROPIONIC ACID)	1	306-37-6	1,2-DIMETHYLHYDRAZINE.2HCl
1	120-36-5	alpha-(2,4-DICHLOROPHOENOXY)PROPIONIC ACID	1	26049-69-4	2-(2,2-DIMETHYLHYDRAZINO)-4-(5-NITRO-2-FURYL)THIAZOLE
1	6965-71-5	alpha-(2,5-DICHLOROPHOENOXY)PROPIONIC ACID	1	4164-28-7	DIMETHYLNITRAMINE
1	94-75-7	2,4-DICHLOROPHOENOXYACETIC ACID	1,2,3	62-75-9	DIMETHYLNITROSAMINE (see N-NITROSODIMETHYLAMINE)
1	94-80-4	2,4-DICHLOROPHOENOXYACETIC ACID, N-BUTYL ESTER	1,2,3	62-75-9	N,N-DIMETHYLNITROSAMINE (see N-NITROSODIMETHYLAMINE)
1	25168-26-7	2,4-DICHLOROPHOENOXYACETIC ACID, ISOCTYL ESTER	4	513-37-1	DIMETHYLVINYL CHLORIDE
1	94-11-1	2,4-DICHLOROPHOENOXYACETIC ACID, ISOPROPYL ESTER	1	6119-92-2	DINITRO(1-METHYLHEPTYL)PHENYL CROTONATE
1	330-54-1	3-(3,4-DICHLOROPHENYL)-1,1-DIMETHYLUREA			
1	97-16-5	2,4-DICHLOROPHENYLBENZENE SULFONATE			
4	78-87-5	1,2-DICHLOROPROPANE			
3	542-75-6	1,3-DICHLOROPROPENE (see TELONE II)			
3	21498-08-8	2-[1-(2,6-DICHLOROPHOENOXY)-ETHYL]-2-IMIDAZOLINE.HCl (see LOFEXIDINE.HCl)			
1	62-73-7	DICHLORVOS			
1	115-32-2	DICOFOL			

PLOT	CAS NUMBER	CHEMICAL NAME	PLOT	CAS NUMBER	CHEMICAL NAME
1	51-28-5	2,4-DINITROPHENOL	2,4	67-21-0	DL-ETHIONINE
3	1011-73-0	2,4-DINITROPHENOL, SODIUM	4	938-73-8	o-ETHOXYBENZAMIDE
3	55380-34-2	1,4-DINITROSO-2,6-DIMETHYLPIPERAZINE	3	91-53-2	ETHOXYQUIN
1	55557-00-1	DINITROSOHOMOPIPERAZINE	4	140-88-5	ETHYL ACRYLATE
1	101-25-7	N,N-DINITROSOPIENTAMETHYLENETETRAMINE	1,2,3,4	64-17-5	ETHYL ALCOHOL
1	140-79-4	DINITROSOPIPERAZINE	4	16301-26-1	Z-ETHYL-O,N,N-AZOXYETHANE
1	121-14-2	2,4-DINITROTOLUENE	4	57497-29-7	Z-ETHYL-O,N,N-AZOXYMETHANE
1	123-91-1	1,4-DIOXANE	4	100-41-4	ETHYL BENZENE
1	123-91-1	p-DIOXANE (see 1,4-DIOXANE)	1	105-36-2	ETHYL BROMOACETATE
1	78-34-2	DIOXATHION	1	14239-68-0	ETHYL CADMATE (see CADMIUM DIETHYLDITHIOCARBAMATE)
1	1746-01-6	DIOXIN (see 2,3,7,8-TETRACHLORODIBENZO-p-DIOXIN)	1	637-07-0	ETHYL-alpha-p-CHLOROPHOXYISOBUTYRATE (see CLOFIBRATE)
1	971-15-3	DIPENTAMETHYLENE THIURAM HEXASULFIDE	1	2629-59-6	S-ETHYL-L-CYSTEINE
3	147-24-0	DIPHENHYDRAMINE.HCl	1	72-56-0	p,p'-ETHYL-DDD
1	74-31-7	DIPHENYL-p-PHENYLENEDIAMINE	1	74920-78-8	N-ETHYL-N-FORMYLHYDRAZINE
1	86-29-3	DIPHENYLACETONITRILE	2	77-83-8	ETHYL METHYLPHENYLLGLYCIDATE
1	102-09-0	DIPHENYLCARBONATE	1	63885-23-4	N-ETHYL-N-NITRO-N-NITROSOGUANIDINE
1	57-41-0	5,5-DIPHENYLHYDANTOIN	3	759-73-9	1-ETHYL-1-NITROSOUREA
1	86-30-6	DIPHENYLNITROSAMINE (see N-NITROSODIPHENYLAMINE)	3	759-73-9	N-ETHYL-N-NITROSOUREA (see 1-ETHYL-1-NITROSOUREA)
1	---	N,N-DIPOXYL-4-(4'-PYRIDYL-1'-OXIDE)AZO)ANILINE	2	614-95-9	1-ETHYL-1-NITROSOURETHAN (see NITROSOETHYLURETHAN)
3	621-64-7	DIPROPYLNITROSAMINE (see N-NITROSODIPROPYLAMINE)	1	5456-28-0	ETHYL SELENAC (see SELENIUM DIETHYLDITHIOCARBAMATE)
3,4	68-89-3	DIPYRONE	1	20941-65-5	ETHYL TELLURAC
1	142-59-6	DISODIUM ETHYLENEBISDITHIOCARBAMATE (see ETHYLENEBISDITHIOCARBAMATE, DISODIUM)	1	97-77-8	ETHYL TUADS (see TETRAETHYLTHIURAM DISULFIDE)
1	7757-82-6	DISODIUM SULFATE (see SULFATE, SODIUM)	1	14324-55-1	ETHYL ZIMATE (see ZINC DIETHYLDITHIOCARBAMATE)
1	97-77-8	DISULFIRAM (see TETRAETHYLTHIURAM DISULFIDE)	1	106-93-4	ETHYLENE DIBROMIDE (see 1,2-DIBROMOETHANE)
1	142-59-6	DITHANE (see ETHYLENEBISDITHIOCARBAMATE, DISODIUM)	1	107-06-2	ETHYLENE DICHLORIDE (see 1,2-DICHLOROETHANE)
1	142-46-1	2,5-DITHIOBIUREA	1	1072-53-3	ETHYLENE GLYCOL
1	79-40-3	DITHIOOXAMIDE	1	151-56-4	ETHYLENE IMINE
1	330-54-1	DIURON (see 3-(3,4-DICHLOROPHENYL)-1,1-DIMETHYLUREA)	1	75-21-8	ETHYLENE OXIDE
1	1596-84-5	DMASA (see DAMINOZIDE)	1	96-45-7	ETHYLENE THIOUREA
1	57-97-6	DMBA (see 7,12-DIMETHYLBENZ(a)ANTHRACENE)	1	120-93-4	ETHYLENE UREA
3	868-85-9	DMHP (see DIMETHYL HYDROGEN PHOSPHITE)	1	142-59-6	ETHYLENEBISDITHIOCARBAMATE, DISODIUM
1,2,3	62-75-9	DMN (see N-NITROSODIMETHYLAMINE)	1	106-87-6	1-ETHYLENEOXY-3,4-EPOXYCYCLOHEXANE DI(2-ETHYLHEXYL)ADIPATE
1	120-61-6	DMT (see DIMETHYL TEREPHTHALATE)	2	103-23-1	DI(2-ETHYLHEXYL)PHTHALATE
1	2439-10-3	N-DODECYLGUANIDINE ACETATE	2	117-81-7	DI(2-ETHYLHEXYL)PHTHALATE
1	2439-10-3	DODINE (see n-DODECYLGUANIDINE ACETATE)	1	18413-14-4	ETHYLHYDRAZINE.HCl
1,3	90-43-7	DOWICIDE-1 (see o-PHENYLPHENOL)	1	38434-77-4	ETHYLNITROSOCYANAMIDE
1	88-06-2	DOWICIDE-2S (see 2,4,6-TRICHLOROPHENOL)	3	759-73-9	ETHYLNITROSOUREA (see 1-ETHYL-1-NITROSOUREA)
1,3	87-86-5	DOWICIDE-7 (see 2,3,4,5,6-PENTACHLOROPHENOL)	3	842-00-2	4-ETHYLSULPHONYLNAPHTHALENE-1-SULFONAMIDE
2,3	9011-18-1	DS-M-1 (see DEXTRAN SULFATE SODIUM (DS-M-1))	1	297-76-7	ETHYNODIOL DIACETATE
3	9011-18-1	DST-H (see DEXTRAN SULFATE SODIUM (DST-H))	1	8056-92-6	ETHYNODIOL DIACETATE/ETHINYL ESTRADIOL [10:1] (see OVULEN)
1	95-33-0	DURAX (see N-CYCLOHEXYL-2-BENZOTHIAZOLE SULFENAMIDE)	1	96-45-7	ETU (see ETHYLENE THIOUREA)
1,4	106-93-4	EDB (see 1,2-DIBROMOETHANE)	1	470-82-6	EUCALYPTOL
1	107-06-2	EDC (see 1,2-DICHLOROETHANE)	3	97-53-0	EUGENOL
1	9004-59-5	EDIFAS A	1,2,3,4	24554-26-5	FANFT (see N-[4-(5-NITRO-2-FURYL)-2-THIAZOLYL] FORMAMIDE)
1	9004-32-4	EDIFAS B	1	2353-45-9	FAST GREEN FCF (see FD & C GREEN NO. 3)
1	150-38-9	EDTA (see EDTA, TRISODIUM SALT TRIHYDRATE)	1	140-56-7	FENAMINOSULF, FORMULATED
1	150-38-9	EDTA, TRISODIUM SALT TRIHYDRATE	1	55-38-9	FENTHION
1	316-42-7	EMETINE.2HCl	3	51630-58-1	FENVALERATE
1	55965-13-4	EMULSIFIER YN	1	14484-64-1	FERBAM (see FERRIC DIMETHYLDITHIOCARBAMATE)
1	115-29-7	ENDOSULFAN	1	14484-64-1	FERRIC DIMETHYLDITHIOCARBAMATE
1,3	50-18-0	ENDOXAN (see CYCLOPHOSPHAMIDE)	1	mixture	FERRIC NITROSODIMETHYLDITHIOCARBAMATE AND TETRAMETHYLTHIURAM DISULFIDE (see VANGUARD GF)
1	72-20-8	ENDRIN	3	67774-32-7	FIREMASTER FF-1 (see POLYBROMINATED BIPHENYL MIXTURE)
3	13838-16-9	ENFLURANE	3	54143-56-5	FLECAINIDE ACETATE
1	8015-30-3	ENOVID	2	2164-17-2	FLUOMETURON
1	---	ENOVID-E	1	363-17-7	N-(2-FLUORENYL)-2,2,2-TRIFLUOROACETAMIDE
3	759-73-9	ENU (see 1-ETHYL-1-NITROSOUREA)	1,2,3,4	53-96-3	FLUORENYLACETAMIDE (see 2-ACETYLAMINOFLUORENE)
3	134-72-5	EPHEDRINE SULPHATE	1	28314-03-6	N-1-FLUORENYLACETAMIDE (see 1-ACETYLAMINOFLUORENE)
1,4	106-89-8	EPICHLOROHYDRIN	1,2,3,4	53-96-3	N-2-FLUORENYLACETAMIDE (see 2-ACETYLAMINOFLUORENE)
2,3	75-56-9	1,2-EPOXYPROPANE (see 1,2-PROPYLENE OXIDE)	1	938-73-8	ETHENZAMIDE (see o-ETHOXYBENZAMIDE)
3	6381-77-7	ERYTHBORATE, SODIUM	2	53-96-3	ETHIONAMIDE
1	16423-68-0	ERYTHRROSINE (see FD & C RED NO. 3)	1	53-96-3	ETHIONINE
1	50-28-2	ESTRADIOL	1,2,3,4	53-96-3	ETHIONONE
1	50-28-2	ESTRADIOL-17beta (see ESTRADIOL)	1	28314-03-6	ETHIONONE
1	22966-79-6	ESTRADIOL MUSTARD	1	53-96-3	ETHIONONE
3	140-67-0	ESTRAGOLE	1,2,3,4	53-96-3	ETHIONONE
4	938-73-8	ETHENZAMIDE (see o-ETHOXYBENZAMIDE)	1,2,3,4	53-96-3	ETHIONONE
1	536-33-4	ETHIONAMIDE	1	13073-35-3	ETHIONINE

PLOT	CAS NUMBER	CHEMICAL NAME	PLOT	CAS NUMBER	CHEMICAL NAME
1	28322-02-3	N-4-FLUORENYLACETAMIDE (see 4-ACETYLAMINOFLUORENE)	1	319-85-7	beta-1,2,3,4,5,6-HEXACHLOROCYCLOHEXANE
1	---	N-1-FLUORENYLDIACETAMIDE (see N-1-DIACETAMIDOFLUORENE)	1	58-89-9	gamma-1,2,3,4,5,6-HEXACHLOROCYCLOHEXANE
1,3	7681-49-4	FLUORIDE, SODIUM	1	67-72-1	HEXACHLOROETHANE
1	324-93-6	4'-FLUORO-4-AMINODIPHENYL	1	70-30-4	HEXACHLOROPHENE
1	398-32-3	N-(4'-FLUORO-4-BIPHENYLYL)ACETAMIDE (see N-(4'-FLUOROBIPHENYL)ACETAMIDE)	1	2163-79-3	3-(HEXAHYDRO-4,7-METHANOINDAN-5-YL)-1,1-DIMETHYLUREA
1	398-32-3	N-(4'-FLUOROBIPHENYL)ACETAMIDE	1	100-97-0	HEXAMETHYLENETETRAMINE
3	593-70-4	FLUOROCARBON 31	1	531-18-0	HEXAMETHYLIMIDAMINE
3	75-88-7	FLUOROCARBON 133a	1	628-02-4	HEXANAMIDE
1	51-21-8	5-FLUOROURACIL	1	26049-68-3	HNT (see 2-HYDRAZINO-4-(5-NITRO-2-FURYL)THIAZOLE)
1	3570-75-0	FNT (see FORMIC ACID 2-[4-(5-NITRO-2-FURYL)-2-THIAZOLYL]HYDRAZIDE)	4	1415-93-6	HUMIC ACIDS, COMMERCIAL GRADE
1	133-07-3	FOLPET (see N-(TRICHLOROMETHYLTHIO)PHTHALIMIDE)	1,4	302-01-2	HYDRAZINE
2,3,4	50-00-0	FORMALDEHYDE	1,2,3	10034-93-2	HYDRAZINE SULFATE
1	31873-81-1	FORMIC ACID 2-[4-(2-FURYL)-2-THIAZOLYL]HYDRAZIDE	1	26049-71-8	2-HYDRAZINO-4-(p-AMINOPHENYL)THIAZOLE
1	32852-21-4	FORMIC ACID 2-(4-METHYL-2-THIAZOLYL)HYDRAZIDE	1	26049-68-3	2-HYDRAZINO-4-(5-NITRO-2-FURYL)THIAZOLE
1	3570-75-0	FORMIC ACID 2-[4-(5-NITRO-2-FURYL)-2-THIAZOLYL]HYDRAZIDE	1	26049-70-7	2-HYDRAZINO-4-(p-NITROPHENYL)THIAZOLE
1	140-56-7	FORMULATED FENAMINOSULF (see FENAMINOSULF, FORMULATED)	1	34176-52-8	2-HYDRAZINO-4-PHENYLTHIAZOLE
1	2302-84-3	1-FORMYL-3-THIOSEMICARBAZIDE	1	619-67-0	p-HYDRAZINOBENZOIC ACID
1	624-84-0	FORMYLHYDRAZINE	1	122-66-7	HYDRAZOBENZENE
3,4	75-09-2	FREON 30 (see METHYLENE CHLORIDE)	4	7647-01-0	HYDROCHLORIC ACID
1	2411-74-7	2-FURALDEHYDE SEMICARBAZONE	1	50-23-7	HYDROCORTISONE
1	98-01-1	FURFURAL	4	7647-01-0	HYDROGEN CHLORIDE (see HYDROCHLORIC ACID)
1	3688-53-7	2-(2-FURYL)-3-(5-NITRO-2-FURYL)ACRYLAMIDE (see AF-2)	1	7722-84-1	HYDROGEN PEROXIDE
1	3688-53-7	FURYLFURAMIDE (see AF-2)	1	103-16-2	HYDROQUINONE MONOBENZYL ETHER
3	23255-69-8	FUSARENON-X	1,3	53-95-2	N-HYDROXY-N-ACETYL-2-AMINOFLUORENE (see N-HYDROXY-2-ACETYLAMINOFLUORENE)
4	35449-36-6	GEMCADIOL	1,3,4	103-90-2	3-HYDROXY-4-ACETYLAMINOBIPHENYL
2	25812-30-0	GEMFIBROZIL	3	51410-44-7	N-HYDROXY-2-ACETYLAMINOFLUORENE
1	97-16-5	GENITE-R99 (see 2,4-DICHLOROPHENYLBENZENE SULFONATE)	1	5036-03-3	2-HYDROXY-1,2-DIPHENYLETHANONE (see BENZOIN)
4	548-62-9	GENTIAN VIOLET	1,3	53-95-2	p-HYDROXYACETANILIDE (see ACETAMINOPHEN)
1	---	GERMANATE, SODIUM	1,3,4	103-90-2	1'-HYDROXYESTRAGOLE
1	139-40-2	GESAMIL (see PROPAZINE)	1	5036-03-3	1-(2-HYDROXYETHYL)-3-(5-NITROFURFURLIDENE)AMINO-2-IMIDAZOLIDINONE
1	77-06-5	GIBBERELLIC ACID	1	109-84-2	2-HYDROXYETHYLHYDRAZINE
3	67730-11-4	GLU-P-1 (see 2-AMINO-6-METHYLDIPYRIDO[1,2-a:3',2'-d]IMIDAZOLE)	1	---	HYDROXYPROPYL DISTARCH GLYCEROL
3	67730-10-3	GLU-P-2 (see 2-AMINODIPYRIDO[1,2-a:3',2'-d]IMIDAZOLE)	1,2,3	148-24-3	8-HYDROXYQUINOLINE
3	56-86-0	L-GLUTAMIC ACID	1,3	5208-87-7	1'-HYDROXYSAFROLE
2	2757-90-6	beta-N-[gamma-L(+)-GLUTAMYL]-4-HYDROXYMETHYLPHENYLHYDRAZINE	4	7681-52-9	HYPOCHLOROUS ACID, SODIUM SALT (see SODIUM HYPOCHLORITE)
1	96-24-2	GLYCEROL alpha-MONOCHLOROHYDRIN	1	21416-87-5	ICRF-159
1	765-34-4	GLYCIDALDEHYDE	1	120-93-4	2-IMIDAZOLIDINONE (see ETHYLENE UREA)
1	1072-53-3	GLYCOL SULFATE (see ETHYLENE GLYCOL)	1	3458-22-8	3,3'-IMINOBIS-1-PROPANOL DIMETHANESULFONATE (ESTER).HCl
1	3741-38-6	GLYCOL SULFITE	1	32607-00-4	IMINODIACETIC ACID, MONOSODIUM
4	71277-79-7	GLYCYYRRHIZINATE, DISODIUM	1,4	860-22-0	INDIGO CARMINE (see FD & C BLUE NO. 2)
1	4680-78-8	FD & C GREEN NO. 1	1	87-51-4	INDOLE-3-ACETIC ACID
1	5141-20-8	FD & C GREEN NO. 2	1,2,3	54-85-3	INH (see ISONIAZID)
1	2353-45-9	FD & C GREEN NO. 3	4	144-48-9	IODOACETAMIDE
1	126-07-8	GRISEOFULVIN	1	75-47-8	IODOFORM
2	9000-30-0	GUAR GUM	1	122-42-9	IPC (see ISOPROPYL-N-PHENYL CARBAMATE)
1	4680-78-8	GUINEA GREEN B (see FD & C GREEN NO. 1)	1	3458-22-8	IPD (see 3,3'-IMINOBIS-1-PROPANOL DIMETHANESULFONATE(ESTER).HCl)
2	9000-01-5	GUM ACACIA (see GUM ARABIC)	3,4	76180-96-6	IQ (see 2-AMINO-3-METHYLIMIDAZO[4,5-f]QUINOLINE)
2	9000-01-5	GUM ARABIC	4	---	IQ.HCl (see 2-AMINO-3-METHYLIMIDAZO[4,5-f]QUINOLINE.HCl)
1	86-50-0	GUSATHION (see AZINPHOSMETHYL)	3	6381-77-7	ISOASCORBATE (see ERYTHORBATE, SODIUM)
1,4	118-74-1	HCB (see HEXACHLOROBENZENE)	1	297-78-9	ISOBENZAN (see TELODRIN)
1	mixture	HCDD MIXTURE	4	4247-02-3	ISOBUTYL p-HYDROXYBENZOATE
1	517-28-2	HEMATOXYLIN	1	5461-85-8	N-ISOBUTYL-N'-NITRO-N-NITROSOGUANIDINE
1	76-44-8	HEPTACHLOR	3	760-60-1	N-ISOBUTYL-N-NITROSOUREA (see N-NITROSO-N-ISOBUTYLUREA)
1	1121-92-2	HEPTAMETHYLENEIMINE	1	119-38-0	ISOLAN (see 1-ISOPROPYL-3-METHYL- <i>a</i> -PYRAZOLYLIDIMETHYL CARBAMATE)
1	1241-27-6	HEPTYLAMINE	1,2,3	54-85-3	ISONIAZID
1	2163-79-3	HERCULES-7531 (see 3-(HEXAHYDRO-4,7-METHANOINDAN-5-YL)-1,1-DIMETHYLUREA)	3	1453-82-3	ISONICOTINAMIDE
1	87-51-4	HETEROAUXIN (see INDOLE-3-ACETIC ACID)	1	55-22-1	ISONICOTINIC ACID
1,4	118-74-1	HEXACHLOROBENZENE	1,2,3	54-85-3	ISONICOTINIC ACID HYDRAZIDE (see ISONIAZID)
1	87-68-3	HEXACHLOROBUTADIENE			
3	608-73-1	HEXACHLOROCYCLOHEXANE			
1	319-84-6	alpha-1,2,3,4,5,6-HEXACHLOROCYCLOHEXANE			

PLOT	CAS NUMBER	CHEMICAL NAME	PLOT	CAS NUMBER	CHEMICAL NAME
1	149-17-7	ISONICOTINIC ACID VANILLYLIDENEHYDRAZIDE	4	531-06-6	METHAFURYLENE
3	78-59-1	ISOPHORONE	4	493-78-7	METHAPHENILENE
1	3778-73-2	ISOPHOSPHAMIDE	3	135-23-9	METHAPYRILENE.HCl
1	101-73-5	p-ISOPROPOXYDIPHENYLAMINE	1	60-56-0	METHIMAZOLE
1	101-21-3	ISOPROPYL-N-(3-CHLOROPHENYL)CARBAMATE	4	59-51-8	DL-METHIONINE
3	65765-07-3	1-ISOPROPYL-4-(m-METHOXYPHENYL)-7-METHYL-2(1H)-QUINAZOLINONE (see COMPOUND 50-892)	1	59-05-2	METHOTREXATE
3	22760-18-5	1-ISOPROPYL-7-METHYL-4-PHENYL-2(IH)-QUINAZOLINONE (see PROQUAZONE)	2	---	2-METHOXY-4-AMINOAZOBENZENE
1	119-38-0	1-ISOPROPYL-3-METHYL-4-PYRAZOLOGYLDIMETHYL CARBAMATE	2	3544-23-8	3-METHOXY-4-AMINOAZOBENZENE
1	122-42-9	ISOPROPYL-N-PHENYL CARBAMATE	1	5834-17-3	2-METHOXY-3-AMINODIBENZOFURAN
2	80-05-7	4,4'-ISOPROPYLIDENEDIPHENOL (see BISPHENOL A)	1	5834-17-3	2-METHOXY-3-AMINODIBENZOFURAN (see 2-METHOXY-3-AMINODIBENZOFURAN)
1	120-58-1	ISOSAFROLE	1	72-43-5	METHOXYCHLOR
3	520-18-3	KAEMPFEROL	1	1701-77-5	METHOXPHENYLACETIC ACID
4	12737-87-0	KAECHLOR 400	4	563-47-3	METHYL ALLYL CHLORIDE (see 3-CHLORO-2-METHYLPROPENE, TECHNICAL GRADE (CONTAINING 5% DIMETHYLVINYL CHLORIDE))
1	6119-92-2	KARTHANE (see DINITRO(1-METHYLHEPTYL)PHENYL CROTONATE)	4	57497-34-4	Z-METHYL-O,N,N-AZoxyETHANE
1	330-54-1	KARMEX (see 3-(3,4-DICHLOROPHENYL)-1,1-DIMETHYLUREA)	3	25843-45-2	Z-METHYL-O,N,N-AZoxyMETHANE (see AZOXYMETHANE)
1	115-32-2	KELTHANE (see DICOFOL)	1	6294-89-9	METHYL CARBAZATE
1	143-50-0	KEPONE	1	71-55-6	METHYL CHLOROFORM (see 1,1,1-TRICHLOROETHANE)
3	9011-18-1	KMDS-H (see DEXTRAN SULFATE SODIUM (KMDS-H))	2	21340-68-1	METHYL CLOFENAPATE
1	303-34-4	LASICARPINE	1	---	1-METHYL-1,4-DIHYDRO-7-[2-(5-NITROFURYL)VINY]-4-OXO-1,8-NAPHTHYRIDINE-3-CARBOXYLATE, POTASSIUM
1,4	301-04-2	LEAD ACETATE	4	55-80-1	3'-METHYL-4-DIMETHYLAMINOAZOBENZENE
1,4	1335-32-6	LEAD ACETATE, BASIC	1	99-80-9	N-METHYL-N,4-DINITROANILINE
1	19010-66-3	LEAD DIMETHYLDITHIOCARBAMATE	1	9004-59-5	METHYL ETHYL CELLULOSE (see EDIFAS A)
1	24365-47-7	LEUPEPTIN	1,2	758-17-8	N-METHYL-N-FORMYLHYDRAZINE
1	5141-20-8	LIGHT GREEN SF YELLOWISH (see FD & C GREEN NO. 2)	2	27323-65-5	METHYL LINOLEATE HYDROPEROXIDE
1	58-89-9	LINDANE (see gamma-1,2,3,4,5,6-HEXACHLOROCYCLOHEXANE)	2	---	METHYL LINOLEATE, NATIVE
1	434-13-9	LITHOCHOLIC ACID	4	80-62-6	METHYL METHACRYLATE
2	9000-40-2	LOCUST BEAN GUM	1	66-27-3	METHYL METHANESULFONATE
3	21498-08-8	LOFEXIDINE.HCl	1,2,3,4	70-25-7	N-METHYL-N'-NITRO-N-NITROSOGUANIDINE
1	21884-44-6	LUTEOSKYRIN	1	129-15-7	2-METHYL-1-NITROANTRAQUINONE
1	8065-91-6	LUTESTRAL	1	21638-36-8	4-METHYL-1-[5-NITROFURYLIDENE]AMINO]-2-IMIDAZOLIDINONE
1,3	67-20-9	MACRODANTIN (see 1-(5-NITROFURYLIDENE)AMINOHYDANTOIN)	1	16699-10-8	4-(4-METHYL-N-NITROSOAMINOSTYRYL)QUINOLINE
1,2	632-99-5	MAGENTA I (see ROSANILINE.HCl)	1	63412-06-6	N-METHYL-N-NITROSOBENZAMIDE
1,2,3	569-61-9	p-MAGENTA (see p-ROSANILINE.HCl)	1	---	N-(N-METHYL-N-NITROSOCARBAMOYL)-L-ORNITHINE
1	18968-99-5	MAGNESIUM PEMOLINE (see 2-AMINO-5-PHENYL-2-OXAZOLIN-4-ONE + Mg(OH)2)	1	14026-03-0	R(-)-2-METHYL-N-NITROSOPIPERIDINE
1	1634-78-2	MALAOXON	1	36702-44-0	S(+)-2-METHYL-N-NITROSOPIPERIDINE
1	121-75-5	MALATHION	1	684-93-5	N-METHYL-N-NITROSOUREA (see N-NITROSO-N-METHYUREA)
1	1634-78-2	MALATHION-O-ANALOG (see MALAOXON)	3	21308-79-2	METHYL 12-OXO-trans-10-OCTADECENOATE
1,2	123-33-1	MALEIC HYDRAZIDE	1	298-00-0	METHYL PARATHION
2	24382-04-5	MALONALDEHYDE, SODIUM	1,3	614-00-6	METHYL-PHENYL-NITROSAMINE (see NITROSOMETHYLANILINE)
1	mixture	MAM ACETATE AND CYCASIN MIXTURE (see METHYLAZOXYMETHANOL ACETATE AND CYCASIN MIXTURE)	1	144-34-3	METHYL SELENAC (see SELENIUM DIMETHYLDITHIOCARBAMATE)
1	12427-38-2	MANEB (see MANGANESE ETHYLENEBISTHIOCARBAMATE)	1,3	137-30-4	METHYL ZIMATE (see ZINC DIMETHYLDITHIOCARBAMATE)
1	12427-38-2	MANGANESE ETHYLENEBISTHIOCARBAMATE	1	443-72-1	(N-6)-METHYLADENINE
2	69-65-8	D-MANNITOL	1	1867-73-8	(N-6)-METHYLADENOSE
1	576-68-1	MANNITOL NITROGEN MUSTARD	1	mixture	METHYLAZOXYMETHANOL ACETATE AND CYCASIN MIXTURE
3	68006-83-7	Me ₂ alpha-C (see 2-AMINO-3-METHYL-9H-PYRIDO-[2,3-b]-INDOLE)	1,2	56-49-5	METHYLCHOLANTHRENE (see 3-METHYLCHOLANTHRENE)
4	---	MeO (see 2-AMINO-3,4-DIMETHYLIMIDAZO[4,5-f]QUINOLINE)	1,2	56-49-5	3-METHYLCHOLANTHRENE
3	108-78-1	MELAMINE	1	101-14-4	4,4'-METHYLENE-BIS(2-CHLOROANILINE)
1	148-82-3	MELPHALAN	1	64049-29-2	4,4'-METHYLENE-BIS(2-CHLOROANILINE).2HCl
1	15356-70-4	DL-MENTHOL	1	838-88-0	4,4'-METHYLENE-BIS(2-METHYLANILINE)
1	67-98-1	MER-25	3,4	75-09-2	METHYLENE CHLORIDE
1	149-30-4	2-MERCAPTOBENZOTHIAZOLE	1	101-61-1	4,4'-METHYLENEBIS(N,N-DIMETHYL)BENZENAMINE
1	155-04-4	2-MERCAPTOBENZOTHIAZOLE, ZINC	3	13552-44-8	4,4'-METHYLENEDIANILINE.2HCl
3	19767-45-4	2-MERCAPTOETHANESULFONATE, SODIUM	1	471-29-4	METHYLGUANIDINE
1	50-44-2	6-MERCAPTOPURINE	1	578-76-7	7-METHYLGUANINE
1	7487-94-7	MERCURIC CHLORIDE	1	60-34-4	METHYLHYDRAZINE
1	115-09-3	MERCURYMETHYLCHLORIDE	1	302-15-8	METHYLHYDRAZINE SULFATE
1	72-33-3	MESTRANOL	1	115-09-3	METHYLMERCURIC ACETATE (see MERCURYMETHYLCHLORIDE)
1	57-39-6	METEPA			

PLOT	CAS NUMBER	CHEMICAL NAME	PLOT	CAS NUMBER	CHEMICAL NAME
1	115-09-3	METHYLMERCURY CHLORIDE (see MERCURYMETHYLCHLORIDE)	1	59-87-0	5-NITRO-2-FURALDEHYDE SEMICARBAZONE
1	---	(N-6)-(METHYLNITROSO)ADENINE	1	772-43-0	5-NITRO-2-FURAMIDOXIME
1	---	(N-6)-(METHYLNITROSO)ADENOSINE	1	92-55-7	5-NITRO-2-FURANMETHANEDIOL DIACETATE
3	33868-17-6	METHYLNITROSOCYANAMIDE	1	75198-31-1	3-(5-NITRO-2-FURYL)-IMIDAZO(1,2-alpha)PYRIDINE
2	91-62-3	6-METHYLQUINOLINE	1	2122-86-3	5-(5-NITRO-2-FURYL)-1,3,4-OXADIAZOLE-2-OL
2	611-32-5	8-METHYLQUINOLINE	1	36133-88-7	N-[3-(5-NITRO-2-FURYL)-1,2,4-OXADIAZOLE-5-YL]-METHYLACETAMIDE
1,3	56-04-2	METHYLTHIOURACIL	1	2578-75-8	N-[5-(5-NITRO-2-FURYL)-1,3,4-THIADIAZOL-2-YL]ACETAMIDE
1	5800-19-1	METIAPINE	2	53757-28-1	4-(5-NITRO-2-FURYL)THIAZOLE
1	443-48-1	METRONIDAZOLE	1	531-82-8	N-[4-(5-NITRO-2-FURYL)-2-THIAZOLYL]ACETAMIDE
1	315-18-4	MEXACARBATE	1,2,3,4	24554-26-5	N-[4-(5-NITRO-2-FURYL)-2-THIAZOLYL]FORMAMIDE
1	90-94-8	MICHLER'S KETONE	1	51325-35-0	N,N'-[6-(5-NITRO-2-FURYL)-8-TRIAZINE-2,4-DIYL]BISACETAMIDE
1,3	137-30-4	MILBAM (see ZINC DIMETHYLDITHIOCARBAMATE)	1	4812-22-0	3-NITRO-3-HEXENE
1	2385-85-5	MIREX	1	121-19-7	NITRO-4-HYDROXYPHENYLARSONIC ACID
1	39801-14-4	MIREX, PHOTO-	1	5307-14-2	2-NITRO-p-PHENYLENEDIAMINE
1	126-85-2	MITOMEN (see NITROGEN MUSTARD N-OXIDE)	1	99-56-9	4-NITRO-o-PHENYLENEDIAMINE
1	50-07-7	MITOMYCIN-C	1	99-55-8	5-NITRO-o-TOLUIDINE
1	66-27-3	MMS (see METHYL METHANESULFONATE)	1	602-87-9	5-NITROACENAPHTHENE
1,2,3,4	70-25-7	MNNG (see N-METHYL-N-NITRO-N-NITROSOGUANIDINE)	1	619-17-0	4-NITROANTHRANILIC ACID
1	684-93-5	MNU (see N-NITROSO-N-METHYLUREA)	1	94-52-0	6-NITROBENZIMIDAZOLE
1	101-14-4	MOCA (see 4,4'-METHYLENE-BIS(2-CHLORANILINE))	1	1836-75-5	NITROFEN
3	1068-57-1	MONOACETYL HYDRAZINE	1,3	67-20-9	NITROFURANTOIN (see 1-(5-NITROFURFURLIDENE)AMINOHYDANTOIN)
1	79-11-8	MONOCHLOROACETIC ACID	1	67-20-9	1-(5-NITROFURFURLIDENE)AMINOHYDANTOIN
3	108-90-7	MONOCHLOROBENZENE (see CHLOROBENZENE)	1,3	67-20-9	1-(5-NITROFURFURLIDENE)AMINOHYDANTOIN
3	315-22-0	MONOCROTALINE	1	555-84-0	1-(5-NITROFURFURLIDENE)AMINO-2-IMIDAZOLIDINONE
3	32221-81-1	DL-MONOSODIUM GLUTAMATE	1	51-75-2	NITROGEN MUSTARD
3	142-47-2	L-MONOSODIUM GLUTAMATE	1	126-85-2	NITROGEN MUSTARD N-OXIDE
1	32607-00-4	MONOSODIUM IMINODIACETIC ACID (see IMINODIACETIC ACID, MONOSODIUM)	4	10024-97-2	NITROGEN OXIDE (see NITROUS OXIDE)
1	150-68-5	MONURON (see 3-(p-CHLOROPHENYL)-1,1-DIMETHYLUREA)	1	86-57-7	1-NITRONAPHTHALENE
1	58139-48-3	4-MORPHOLINO-2-(5-NITRO-2-THIENYL)QUINAZOLINE	1	56-75-7	D-(+)-threo-1-(p-NITROPHENYL)-2-DICHLOROACETAMIDO-1,3-PROPANEDIOL (see CHLORAMPHENICOL)
1	3031-51-4	L-5-MORPHOLINOMETHYL-3-[5-(NITROFURFURLIDENE)AMINO-2-OXAZOLIDINONE.HCl]	3	108-03-2	1-NITROPROPANE
1	87-56-9	MUCOCHLORIC ACID (see alpha,beta-DICHLORO-beta-FORMYLACRYLIC ACID)	1	79-46-9	2-NITROPROPANE
1	55-98-1	MYLERAN	1	504-88-1	3-NITROPROPIONIC ACID
1	142-59-6	NABAM (see ETHYLENEBISDITHIOCARBAMATE, DISODIUM)	2	613-50-3	6-NITROQUINOLINE
1	86-86-2	1-NAPHTHALENE ACETAMIDE	2	607-35-2	8-NITROQUINOLINE
1	86-87-3	1-NAPHTHALENE ACETIC ACID	1	38777-13-8	NITROSO-BAYGON
1	2243-62-1	1,5-NAPHTHALENEDIAMINE	2	---	N-NITROSO-BIS-(4,4,4-TRIFLUORO-N-BUTYL)AMINE
1	1465-25-4	N-(1-NAPHTHYL)ETHYLENEDIAMINE.2HCl	1	3276-41-3	N-NITROSO-3,6-DIHYDROOXAZINE-1,2 (see 3,6-DIHYDRO-2-NITROSO-2H-1,2-OXAZINE)
1	93-46-9	sym.-dibeta-NAPHTHYL-p-PHENYLENEDIAMINE	3	62641-67-2	1-NITROSO-5,6-DIHYDROTHYMIN
1	86-88-4	1-(1-NAPHTHYL)-2-THIOUREA	1	16813-36-8	1-NITROSO-5,6-DIHYDROURACIL
1,2	91-59-8	2-NAPHTHYLAMINE	3	89911-79-5	N-NITROSO-2,3-DIHYDROXYPROPYL-2-HYDROXYPROPYLAMINE
1,2	91-59-8	beta-NAPHTHYLAMINE (see 2-NAPHTHYLAMINE)	3	92177-50-9	NITROSO-2,3-DIHYDROXYPROPYL-2-OXOPROPYLAMINE
2	81-16-3	2-NAPHTHYLAMINO,1-SULFONIC ACID	3	89911-78-4	N-NITROSO-2,3-DIHYDROXYPROPYLETHANOLAMINE
2	81-16-3	NAS (see 2-NAPHTHYLAMINO,1-SULFONIC ACID)	2	61034-40-0	1-NITROSO-3,5-DIMETHYL-4-BENZOYLPIPERAZINE
1	2611-82-7	NEW COCCINE (see SX PURPLE)	1	1456-28-6	NITROSO-2,6-DIMETHYLMORPHOLINE
1	531-82-8	NFTA (see N-[4-(5-NITRO-2-FURYL)-2-THIAZOLYL]ACETAMIDE)	4	---	1-NITROSO-1-HYDROXYETHYL-3-CHLOROETHYLUREA
1	7440-02-0	NICKEL	1,4	13743-07-2	N-NITROSO-2-HYDROXYETHYLUREA (see 1-(2-HYDROXYETHYL)-1-NITROSOUREA)
1	373-02-4	NICKEL (II) ACETATE	4	---	1-NITROSO-1-(2-HYDROXYPROPYL)-3-CHLOROETHYLUREA
1	13927-77-0	NICKEL DIBUTYLDITHIOCARBAMATE	4	---	1-NITROSO-1-(2-HYDROXYPROPYL)-3-NITROSO-1-(2-HYDROXYETHYL)AMINE
1	1420-04-8	NICLOSAMIDE (see CLONITRALID)	3	75896-33-2	N-NITROSO-(2-HYDROXYPROPYL)-(2-HYDROXYETHYL)AMINE
3	98-92-0	NICOTINAMIDE	3	56222-35-6	N-NITROSO-3-HYDROXYPYRROLIDINE
1	54-11-5	NICOTINE	3	760-60-1	N-NITROSO-N-ISOBUTYLUREA
2	636-79-3	NICOTINE.HCl	2,3	55090-44-3	N-NITROSO-N-METHYL-N-DODECYLAMINE
2	59-67-6	NICOTINIC ACID	3	937-25-7	N-NITROSO-N-METHYL-4-FLUOROANILINE
1	553-53-7	NICOTINIC ACID HYDRAZIDE	3	943-41-9	N-NITROSO-N-METHYL-4-NITROANILINE
1	---	NIGROSINE	1	13256-11-6	NITROSO-N-METHYL-N-(2-PHENYLETHYLAMINE
1	12034-09-2	NIOBATE, SODIUM	2	75881-20-8	N-NITROSO-N-METHYL-N-TETRADECYLAMINE
1	139-94-6	NITHIAZIDE	2	75881-22-0	N-NITROSO-N-METHYLDECYLAMINE
1,2	7631-99-4	NITRATE, SODIUM	4	79624-33-2	NITROSO-5-METHYLOXAZOLIDONE
1	10102-43-9	NITRIC OXIDE	1	684-93-5	N-NITROSO-N-METHYLUREA
1	139-13-9	NITRILOTRIACETIC ACID	1	615-53-2	N-NITROSO-N-METHYLURETHAN
1	18662-53-8	NITRILOTRIACETIC ACID, TRISODIUM SALT, MONOHYDRATE	3,4	39884-52-1	N-NITROSO-1,3-OXAZOLIDINE
1,2,3	7632-00-0	NITRITE, SODIUM	3	92177-49-6	NITROSO-2-OXOPROPYLETHANOLAMINE
1	1777-84-0	3-NITRO-p-ACETOPHENETIDE			
1	99-59-2	5-NITRO-o-ANISIDINE			

PLOT	CAS NUMBER	CHEMICAL NAME	PLOT	CAS NUMBER	CHEMICAL NAME
3	15973-99-6	DI(N-NITROSO)-PERHYDROPRIMIDINE	1	---	NOVADELOX
1	55556-92-8	NITROSO-1,2,3,6-TETRAHYDROPRIDINE	1,4	303-47-9	OCHRATOXIN A
3	82018-90-4	N-NITROSO(2,2,2-TRIFLUOROETHYL)ETHYLAMINE	4	29082-74-4	OCTACHLOROSTYRENE
1	29929-77-9	N-NITROSO-2,2,4-TRIMETHYL-1,2-DIHYDROQUINOLINE POLYMER	1	50-28-2	17beta-OESTRADIOL (see ESTRADIOL)
3	75881-18-4	1-NITROSO-3,4,5-TRIMETHYLPiperazine	4	143-19-1	OLEATE, SODIUM
3	88208-16-6	N-NITROSOALLYL-2,3-DIHYDROXYPROPYLAMINE	4	73590-58-6	OMEPRAZOLE
3	91308-70-2	N-NITROSOALLYL-2-HYDROXYPROPYLAMINE	1,3	90-43-7	ORTHOXENOL (see o-PHENYLPHENOL)
3	91308-71-3	N-NITROSOALLYL-2-OXOPROPYLAMINE	4	13752-51-7	OTOS (see N-OXYDIETHYLENE THIOCARBAMYL-N-OXYDIETHYLENE SULFENAMIDE)
3	91308-69-9	N-NITROSOALLYLETHANOLAMINE	1	80-33-1	OVEX (see p-CHLOROPHENYL-p-CHLOROBENZENE SULFONATE)
2	---	NITROSOAMYLURETHAN	1	8056-92-6	OVULEN
1	1133-64-8	NITROSOANABASINE	4	23135-22-0	OXAMYL
3	15216-10-1	N-NITROSOAZETIDINE	1	3096-50-2	N-(9-OXO-2-FLUORENYL)ACETAMIDE
1	51542-33-7	N-NITROSOBENZTHIAZURON	1	30418-53-2	1'-OXOSAFROLE
1,3	53609-64-6	N-NITROSOBIS(2-HYDROXYPROPYL)AMINE	1	6452-73-9	OXPRENOLOL.HCl
2,3	60599-38-4	N-NITROSOBIS(2-OXOPROPYL)AMINE	2	101-80-4	4,4'-OXYDIANILINE
1	625-89-8	N-NITROSOBIS(2,2,2-TRIFLUOROETHYL)AMINE	4	13752-51-7	N-OXYDIETHYLENE THIOCARBAMYL-N-OXYDIETHYLENE SULFENAMIDE
1	---	NITROSOCHLORDIAZEPoxide	1	102-77-2	N-OXYDIETHYLENEBENZOTHIAZOLE-2-SULFENAMIDE
3	73785-40-7	N-NITROSOCIMETIDINE	4	2058-46-0	OXYTETRACYCLINE.HCl
1,3	924-16-3	NITROSODIBUTYLAMINE	1,3,4	103-90-2	PARACETAMOL (see ACETAMINOPHEN)
2,3	1116-54-7	N-NITROSODIETHANOLAMINE	1	56-38-2	PARATHION
1,3	55-18-5	N-NITROSODIETHYLAMINE	1	92-69-3	PARAXENOL (see p-PHENYLPHENOL)
1,2,3	62-75-9	N-NITROSODIMETHYLAMINE	1	149-29-1	PATULIN
1	86-30-6	N-NITROSODIPHENYLAMINE	1	27323-18-8	PCBs (see AROCLOR 1254)
1	156-10-5	p-NITROSODIPHENYLAMINE	1	11096-82-5	PCBs (see AROCLOR 1260)
3	621-64-7	N-NITROSODIPROPYLAMINE	1	42737-87-0	PCBs (see KANECHLOR 400)
3	40580-89-0	NITROSODODECAMETHYLENEIMINE	1,4	82-68-8	PCNB (see PENTACHLORONITROBENZENE)
1	17608-59-2	N-NITROSOEPHEDRINE	1,3	87-86-5	PCP (see 2,3,4,5,6-PENTACHLOROPHENOL)
1	38434-77-4	NITROSOETHANE CARBAMONITRILE (see ETHYLNITROSOCYANAMIDE)	3	76-01-7	PENTACHLOROETHANE
3	10595-95-6	NITROSOETHYLMETHYLAMINE	1,4	82-68-8	PENTACHLORONITROBENZENE
2	614-95-9	NITROSOETHYLURETHAN	1,3	87-86-5	2,3,4,5,6-PENTACHLOROPHENOL
1	20917-49-1	NITROSOHEPTAMETHYLENEIMINE	3	76-01-7	PENTALIN (see PENTACHLOROETHANE)
3	932-83-2	N-NITROSOHEXAMETHYLENEIMINE	1	13010-10-1	N-PENTYL-N'-NITRO-N-NITROSOGUANIDINE
1	42579-28-2	1-NITROSOHYDANTOIN	1	1119-68-2	n-PENTYLHYDRAZINE.HCl
1	30310-80-6	NITROSOHYDROXYPROLINE	1	8006-90-4	PEPPERMINT OIL
1	25081-31-6	NITROSOIMINODIACETIC ACID	1,3	127-18-4	PERCHLOROETHYLENE (see TETRACHLOROETHYLENE)
3	86451-37-8	N-NITROSOMETHYL-2,3-DIHYDROXYPROPYLAMINE	1	72-56-0	PERTHANE (see p,p'-ETHYL-DDD)
2,3	55090-44-3	NITROSOMETHYL-N-DODECYLAMINE (see N-NITROSO-N-METHYL-N-DODECYLAMINE)	1	60102-37-6	PETASITENINE
3	75411-83-5	N-NITROSOMETHYL-2-HYDROXYPROPYLAMINE	1,2,3	62-44-2	PHENACETIN
1	16219-98-0	2-NITROSOMETHYLAMINOPYRIDINE	1	8003-03-0	PHENACETIN, ASPIRIN, AND CAFFEINE (see ASPIRIN, PHENACETIN, AND CAFFEINE)
1	69658-91-9	3-NITROSOMETHYLAMINOPYRIDINE	1	60-80-0	PHENAZONE
1	16219-99-1	4-NITROSOMETHYLAMINOPYRIDINE	1	136-40-3	PHENAZOPYRIDINE.HCl
1,3	614-00-6	NITROSOMETHYLANILINE	1	3546-10-9	PHENESTERIN
1	55557-03-4	NITROSOMETHYLPHENIDATE	1	834-28-6	PHENFORMIN.HCl
1	68107-26-6	NITROSOMETHYLUNDECYLAMINE	1,2,3,4	50-06-6	PHENOBARBITAL
1	684-93-5	NITROSOMETHYLUREA (see N-NITROSO-N-METHYLUREA)	1,4	57-30-7	PHENOBARBITAL, SODIUM
3	59-89-2	NITROSOMORPHOLINE (see N-NITROSOMORPHOLINE)	1,2,3,4	50-06-6	PHENOBARBITONE (see PHENOBARBITAL)
3	59-89-2	N-NITROSOMORPHOLINE	2	108-95-2	PHENOL
3	16543-55-8	N'-NITROSONORNICOTINE	1	92-84-2	PHENOTHIAZINE
3	78246-24-9	N'-NITROSONORNICOTINE-1-N-OXIDE	1	63-92-3	PHENOXYBENZAMINE.HCl
3,4	39884-52-1	NITROSOXAZOLIDONE (see N-NITROSO-1,3-OXAZOLIDINE)	1	7227-91-0	1-PHENYL-3,3-DIMETHYLTRIAZENE
1	4515-18-8	NITROSOPIPECOLIC ACID	1	103-72-0	PHENYL ISOTHIOCYANATE
1	5632-47-3	NITROSOPIPERAZINE (see N-NITROSOPIPERAZINE)	1	89-25-8	1-PHENYL-3-METHYL-5-PYRAZOLONE
1	5632-47-3	1-NITROSOPIPERAZINE (see N-NITROSOPIPERAZINE)	1,2	135-88-6	PHENYL-beta-NAPHTYLAMINE
1	5632-47-3	N-NITROSOPIPERAZINE	1	2198-59-6	N-PHENYL-p-PHENYLENEDIAMINE.HCl
1,3	100-75-4	N-NITROSOPIPERIDINE	1	103-85-5	1-PHENYL-2-THIOUREA
1	7519-36-0	NITROSOPROLINE	1	4075-79-0	4'-PHENYLACETANILIDE (see 4-ACETYLAMINOBIPHENYL)
1,2,4	930-55-2	NITROSOPIRROLIDINE (see N-NITROSOPIRROLIDINE)	1,2	842-07-9	1-PHENYLAZO-2-NAPHTHOL
1,2,4	930-55-2	N-NITROSOPIRROLIDINE	3	106-50-3	p-PHENYLENEDIAMINE
1	26541-51-5	N-NITROSOPTHIOMORPHOLINE	1	541-69-5	m-PHENYLENEDIAMINE.2HCl
2	611-23-4	o-NITROSOTOLUENE	1	615-28-1	o-PHENYLENEDIAMINE.2HCl
1	mixture	beta-NITROSTYRENE AND STYRENE MIXTURE (see STYRENE AND beta-NITROSTYRENE MIXTURE)	1	624-18-0	p-PHENYLENEDIAMINE.2HCl
4	10024-97-2	NITROUS OXIDE	4	61-76-7	PHENYLEPHRINE.HCl
4	115-28-6	5-NORBENE-2,3-DIMETHANOL (see CHORENDIC ACID)	1,2,3,4	50-06-6	PHENYLETHYL BARBITURIC ACID (see PHENOBARBITAL)
1	68-23-5	NORETHYNODREL	1	156-51-4	PHENYLETHYLHYDRAZINE SULFATE
1	---	NORETHYNODREL/MESTRANOL [25:1] (see ENOVID-E)	3	122-60-1	PHENYLGLYCIDYL ETHER
1	8015-30-3	NORETHYNODREL/MESTRANOL [66:1] (see ENOVID)	1	100-63-0	PHENYLHYDRAZINE
1	244-63-3	NORHARMAN	1	59-88-1	PHENYLHYDRAZINE.HCl
1,2	8015-12-1	NORLESTRIN			

CHRONOLOGICAL SUPPLEMENT

PLOT	CAS NUMBER	CHEMICAL NAME	PLOT	CAS NUMBER	CHEMICAL NAME
3	66-05-7	beta-PHENYLISOPROPYLHYDRAZINE.HCl	3	26308-28-1	PYRAZAPON (see RIPAZEPAM)
1	62-38-4	PHENYLMERCURIC ACETATE	1	98-96-4	PYRAZINAMIDE
1,3,4	132-27-4	o-PHENYLPHENATE, SODIUM	1	553-53-7	3-PYRIDOYL HYDRAZINE (see NICOTINIC ACID HYDRAZIDE)
1,3	90-43-7	o-PHENYLPHENOL	3	59-33-6	PYRILAMINE MALEATE
1	92-69-3	p-PHENYLPHENOL	1	58-14-0	PYRIMETHAMINE
1	17673-25-5	PHORBOL	1,3	117-39-5	QUERCETIN
1	13171-21-6	PHOSPHAMIDON	1,2,3	6151-25-3	QUERCETIN DIHYDRATE
1	---	PHOSPHATED DISTARCH PHOSPHATE	1,2	---	QUILLAIA EXTRACT
4	7803-51-2	PHOSPHINE	1,2,3	148-24-3	8-QUINOLINOL (see 8-HYDROXYQUINOLINE)
1	13366-73-9	PHOTODIELDRIN (see DIELDRIN, PHOTO-)	1	105-11-3	p-QUINONE DIOXIME
1	39801-14-4	PHOTOMIREX (see MIREX, PHOTO-)	1,4	82-68-8	QUINTOZINE (see PENTACHLORONITROBENZENE)
1	88-96-0	PTHALAMIDE	1,2,3	569-61-9	C.I. BASIC RED 9.HCl (see p-ROSANILINE.HCl)
1	85-44-9	PTHALIC ANHYDRIDE	1,2	3567-69-9	C.I. FOOD RED 3
1	149-17-7	PHTIVAZID (see ISONICOTINIC ACID VANILLYLIDENEHYDRAZIDE)	1,3	3761-53-3	D & C RED NO. 5
1	1918-02-1	PICLORAM	1,2	5160-02-1	D & C RED NO. 9
3	56393-22-7	PILDRALAZINE	1	1248-18-6	D & C RED NO. 10
1	92-13-7	PILOCARPINE	1	3564-09-8	FD & C RED NO. 1
1	7681-93-8	PIMARICIN	1	915-67-3	FD & C RED NO. 2
1,3	100-75-4	PIP (see N-NITROSOPIPERIDINE)	1	16423-68-0	FD & C RED NO. 3
1	110-85-0	PIPERAZINE	1	4548-53-2	FD & C RED NO. 4
1	110-89-4	PIPERIDINE	3	2871-01-4	HC RED NO. 3
1,4	51-03-6	PIPERONYL BUTOXIDE	1	86-30-6	REDAK (see N-NITROSODIPHENYLAMINE)
1	51-03-6	PIPERONYL BUTOXIDE IN SOLVENT	1	2318-18-5	RENARDINE (see SENKIRKINE)
1	120-62-7	PIPERONYL SULFOXIDE	1	50-55-5	RESERPINE
1	1955-45-9	PIVALOLACTONE	4	127-47-9	RETINOL ACETATE
1	86-87-3	PLANOFIX (see 1-NAPHTHALENE ACETIC ACID)	1	13292-46-1	RIFAMPICIN
3	67774-32-7	POLYBROMINATED BIPHENYL MIXTURE	3	26308-28-1	RIPAZEPAM
1	59536-65-1	POLYBROMINATED BIPHENYLS	1,2	632-99-5	ROSANILINE.HCl
1	27323-18-8	POLYCHLORINATED BIPHENYLS (see AROCLOR 1254)	1,2,3	569-61-9	p-ROSANILINE.HCl
1,3	11096-82-5	POLYCHLORINATED BIPHENYLS (see AROCLOR 1260)	1	149-30-4	ROTAX (see 2-MERCAPTOBENZOTHIAZOLE)
4	12737-87-0	POLYCHLORINATED BIPHENYLS (see KANECHLOR 400)	1	83-79-4	ROTENONE
1	---	POLYVINYLPYRIDINE-N-OXIDE	1,2	153-18-4	RUTIN (see RUTIN TRIHYDRATE)
1	3564-09-8	PONCEAU 3R (see FD & C RED NO. 1)	3	12768-44-4	RUTIN SULFATE
1	2611-82-7	PONCEAU 4R (see SX PURPLE)	1,2	153-18-4	RUTIN TRIHYDRATE
1,3	3761-53-3	PONCEAU MX (see D & C RED NO. 5)	1	81-07-2	SACCHARIN
1	4548-53-2	PONCEAU SX (see FD & C RED NO. 4)	1,2,3,4	128-44-9	SACCHARIN, SODIUM
1,3,4	7758-01-2	POTASSIUM BROMATE (see BROMATE, POTASSIUM)	1,2,3	94-59-7	SAFROLE
4	7447-40-7	POTASSIUM CHLORIDE	3	18559-94-9	SALBUTAMOL
1	---	POTASSIUM METABISULFITE (see SULFITE, POTASSIUM METABI-)	1	8052-16-2	SANAMYCIN (see ACTINOMYCIN C)
2	55268-74-1	PRAZIQUANTEL	1	148-82-3	L-SARCOLYSIN (see MELPHALAN)
4	29069-24-7	PREDNIMUSTINE	1	148-18-5	SDDC (see SODIUM DIETHYLDITHIOCARBAMATE TRIHYDRATE)
4	50-24-8	PREDNISOLONE	1	7782-49-2	SELENIUM
1	---	PREMARIN	1	5456-28-0	SELENIUM DIETHYLDITHIOCARBAMATE
3	40778-40-3	PRIMIDOLOL.HCl	1	144-34-3	SELENIUM DIMETHYLDITHIOCARBAMATE
1	671-16-9	PROCARBAZINE	1	7446-34-6	SELENIUM SULFIDE
1	366-70-1	PROCARBAZINE.HCl	1	2318-18-5	SENKIRKINE
1	952-23-8	PROFLAVINE.HCl HEMIHYDRATE	1	63-25-2	SEVIN (see CARBARYL)
1	54-80-8	PRONETHALOL	1	122-34-9	SIMAZINE
1	51-02-5	PRONETHALOL.HCl	1	7784-46-5	SODIUM ARSENITE (see ARSENITE, SODIUM)
1	1120-71-4	PROPANE SULTONE	1	26628-22-8	SODIUM AZIDE (see AZIDE, SODIUM)
1	139-40-2	PROPANAZINE	1	532-32-1	SODIUM BENZOATE (see BENZOATE, SODIUM)
4	79-06-1	2-PROPENAMIDE (see ACRYLAMIDE)	1	6385-58-6	SODIUM BITHIONOLATE
3	104-46-1	p-PROPYNYLANISOLE (see ANETHOLE)	4	7647-14-5	SODIUM CHLORIDE
1,2	57-57-8	beta-PROPIOLACTONE	4	7758-19-2	SODIUM CHLORITE
3	525-66-6	PROPRANOLOL.HCl	1	139-05-9	SODIUM CYCLAMATE (see CYCLAMATE, SODIUM)
1	1114-71-2	PROPYL N-ETHYL-N-BUTYLTHiocarbamate	1	148-18-5	SODIUM DIETHYLDITHIOCARBAMATE TRIHYDRATE
1	77337-54-3	N-N'PROPYL-N-FORMYLHYDRAZINE	1,3	7681-49-4	SODIUM FLUORIDE (see FLUORIDE, SODIUM)
2	121-79-9	PROPYL GALLATE	4	7681-52-9	SODIUM HYPOCHLORITE
1	83-59-0	N-PROPYL ISOME	1	12034-09-2	SODIUM NIOBATE (see NIOBATE, SODIUM)
1	13010-07-6	N-PROPYL-N'-NITRO-N-NITROSOGUANIDINE	1,2	7631-99-4	SODIUM NITRATE (see NITRATE, SODIUM)
3	115-07-1	PROPYLENE	1	7757-82-6	SODIUM SULFATE (see SULFATE, SODIUM)
4	78-87-5	PROPYLENE DICHLORIDE (see 1,2-DICHLOROPROPANE)	2	13755-29-8	SODIUM TETRAFLUOROBORATE (see TETRAFLUOROBORATE, SODIUM)
1	57-55-6	PROPYLENE GLYCOL	1	13472-45-2	SODIUM TUNGSTATE (see TUNGSTATE, SODIUM)
2,3	75-56-9	1,2-PROPYLENE OXIDE	1	110-44-1	SORBIC ACID
1	56795-66-5	PROPYLHYDRAZINE.HCl	3	959-24-0	SOTALOL.HCl
3	621-64-7	DI-N-PROPYLNITROSAMINE (see N-NITROSODIPROPYLAMINE)	1	8002-43-5	SOYBEAN LECITHIN
1	51-52-5	PROPYLTHIOURACIL	3	28754-68-9	SQ 18506 (see trans-5-AMINO-3-[2-(5-NITRO-2-FURYL)VINYL]-1,2,4-OXADIAZOLE)
3	22760-18-5	PROQUAZONE	1,2	7772-99-8	STANNOUS CHLORIDE (see TIN (II) CHLORIDE)
1	1508-45-8	PRORESID	1	---	STARCH ACETATE
1	2611-82-7	SX PURPLE	1,2	10048-13-2	STERIGMATOCYSTIN

PLOT	CAS NUMBER	CHEMICAL NAME	PLOT	CAS NUMBER	CHEMICAL NAME
2	77-83-8	STRAWBERRY ALDEHYDE (see ETHYL METHYLPHENYGLYCIDATE)	1	139-65-1	4,4'-THIODIANILINE
1	18883-66-4	STREPTOZOTOCIN	1	64039-27-6	beta-THIOGUANINE DEOXYRIBOSIDE
1	8001-50-1	STROBANE	1,3	79-19-6	THIOSEMICARBAZIDE
1	100-42-5	STYRENE	1	141-90-2	THIOURACIL
1	mixture	STYRENE AND beta-NITROSTYRENE MIXTURE	1,3	62-56-6	THIOUREA
3,4	96-09-3	STYRENE OXIDE	1,3	137-26-8	THIRAM (see TETRAMETHYLTHIURAM DISULFIDE)
1	1596-84-5	SUCCINIC ACID 2,2-DIMETHYLHYDRAZIDE (see DAMINOZIDE)	4	124-64-1	THPC (see TETRAKIS(HYDROXYMETHYL)PHOSPHONIUM CHLORIDE)
1	57-50-1	SUCROSE	4	55566-30-8	THPS (see TETRAKIS(HYDROXYMETHYL)PHOSPHONIUM SULFATE)
1	971-15-3	SULFADS (see DIPENTAMETHYLENETHIURAM HEXASULFIDE)	1	37087-94-8	TIBRIC ACID (see 2-CHLORO-5-(3,5-DIMETHYLPIPERIDINOSULPHONYL)BENZOIC ACID)
1	95-06-7	SULFALLATE	4	55567-81-2	TILIDINE FUMARATE
1	7757-82-6	SULFATE, SODIUM	1	1114-71-2	TILLAM-6-E (see PROPYL N-ETHYL-N-BUTYLTHiocarbamate)
1	127-69-5	SULFISOXAZOLE	1,2	7772-99-8	TIN (II) CHLORIDE
1	---	SULFITE, POTASSIUM METABI-	1	13463-67-7	TITANIUM DIOXIDE
1	77-79-2	3-SULFOLENE	1	---	TITANIUM OXALATE, POTASSIUM
1	77-46-3	4,4'-SULFONYLBISACETANILIDE	1,3	137-26-8	TMTD (see TETRAMETHYLTHIURAM DISULFIDE)
3,4	68-89-3	SULPYRIN (see DIPYRONE)	3	59-02-9	TMTD (see TETRAMETHYLTHIURAM DISULFIDE)
1,2	2783-94-0	SUNSET YELLOW FCF (see FD & C YELLOW NO. 6)	1	1156-19-0	TOLAZAMIDE
1	22571-95-5	SYMPHYTINE	1	64-77-7	TOLBUTAMIDE
1	569-57-3	TACE	3,4	108-88-3	TOLUENE
2	39300-88-4	TARA GUM	4	26471-62-5	TOLUENE DIISOCYANATE, COMMERCIAL GRADE (2,4-(80%)- AND 2,6 (20%)-)
1	1934-21-0	TARTRAZINE (see FD & C YELLOW NO. 5)	1	636-23-7	2,4-TOLUENEDIAMINE.2HCl (see 2,4-DIAMINOTOLUENE.2HCl)
1	97-18-7	TBP (see 2,2-THIOBIS(4,6-DICHLOROPHENOL))	1	636-23-7	2,4-TOLUENEDIAMINE.2HCl (see 2,4-DIAMINOTOLUENE.2HCl)
1	1746-01-6	TCDD (see 2,3,7,8-TETRACHLORODIBENZO-p-DIOXIN)	2	15481-70-6	2,6-TOLUENEDIAMINE.2HCl (see 2,6-DIAMINOTOLUENE.2HCl)
1,3,4	79-01-6	TCE (see TRICHLOROETHYLENE)	1	6369-59-1	2,5-TOLUENEDIAMINE SULFATE (see 2,5-DIAMINOTOLUENE SULFATE)
1	72-54-8	TDE (see p,p'-DDD)	1	88-19-7	o-TOLUENESULFONAMIDE
1	297-78-9	TELODRIN	1	638-03-9	m-TOLUIDINE.HCl
3	542-75-6	TELONE II	1,2	636-21-5	o-TOLUIDINE.HCl
1	150-68-5	TELVAR (see 3-(p-CHLOROPHENYL)-1,1-DIMETHYLUREA)	1	540-23-8	p-TOLUIDINE.HCl
1	116-06-3	TEMIK (see ALDICARB)	1	622-51-5	p-TOLYLUREA
3	23031-25-6	TERBUTALINE	1	8001-35-2	TOXAPHENE
1	7411-49-6	3,3',4,4'-TETRAAMINOBIPHENYL.4HCl	1	68-76-8	TRENIMON
1	118-75-2	TETRACHLORO-p-BENZOQUINONE (see CHLORANIL)	1	6379-46-0	1,2,3-TRICHLORO-4,6-DINITROBENZENE
1	2438-88-2	2,3,5,6-TETRACHLORO-4-NITROANISOLE	1	634-93-5	2,4,6-TRICHLOROANILINE
1	15721-02-5	2,2',5,5'-TETRACHLOROBENZIDINE	1	71-55-6	1,1,1-TRICHLOROETHANE
1	1746-01-6	2,3,7,8-TETRACHLORODIBENZO-p-DIOXIN	1	79-00-5	1,1,2-TRICHLOROETHANE
1	116-29-0	2,4,5,4'-TETRACHLORODIPHENYL SULFONE	1,3,4	79-01-6	TRICHLOROETHYLENE
3	630-20-6	1,1,1,2-TETRACHLOROETHANE	1	75-69-4	TRICHLOROFUROMETHANE
1	79-34-5	1,1,2,2-TETRACHLOROETHANE	1	133-07-3	N-(TRICHLOROMETHYLTHIO)PHTHALIMIDE
1,3	127-18-4	TETRACHLOROETHYLENE	1	88-06-2	2,4,6-TRICHLOROPHENOL
1,4	961-11-5	TETRACHLORVINPHOS	1	93-72-1	2-(2,4,5-TRICHLOROPHOXY)PROPIONIC ACID
1	97-77-8	TETRAETHYLTHIURAM DISULFIDE	1	93-76-5	2,4,5-TRICHLOROPHOXYACETIC ACID
1	116-29-0	TETRAFIDON (see 2,4,5,4'-TETRACHLORODIPHENYL SULFONE)	1,4	102-71-6	TRIETHANOLAMINE
1	63886-77-1	TETRAFLUORO-m-PHENYLENEDIAMINE.2HCl	1	112-27-6	TRIETHYLENE GLYCOL
2	13755-29-8	TETRAFLUOROBORATE, SODIUM	1	42011-48-3	2,2,2-TRIFLUORO-N-[4-(5-NITRO-2-FURYL)-2-THIAZOLYL]ACETAMIDE
1	40548-68-3	TETRAHYDRO-2-NITROSO-2H-1,2-OXAZINE	1	1582-09-8	TRIFLURALIN
4	124-64-1	TETRAKIS(HYDROXYMETHYL)PHOSPHONIUM CHLORIDE	1	75-47-8	TRIIODOMETHANE (see IODOFORM)
4	55566-30-8	TETRAKIS(HYDROXYMETHYL)PHOSPHONIUM SULFATE	1	137-17-7	2,4,5-TRIMETHYLANILINE
4	35449-36-6	2,2,9,9-TETRAMETHYL-1,10-DECANEDIOL (see GEMCADIOL)	1	21436-97-5	2,4,5-TRIMETHYLANILINE.HCl
1,3	137-26-8	TETRAMETHYLTHIURAM DISULFIDE	1	6334-11-8	2,4,6-TRIMETHYLANILINE.HCl
1	mixture	TETRAMETHYLTHIURAM DISULFIDE AND FERRIC NITROSODIMETHYLITHiocarbamate (see VANGUARD GF)	1	512-56-1	TRIMETHYLPHOSPHATE
1	97-74-5	TETRAMETHYLTHIURAM MONOSULFIDE	1	2489-77-2	TRIMETHYLTHIOUREA
1	2227-13-6	TETRASUL (see p-CHLOROPHENYL-2,4,5-TRICHLOROPHENYL SULFIDE)	1	900-95-8	TRIPHENYLTTIN ACETATE
1	64039-27-6	beta-TGdR (see beta-THIOGUANINE DEOXYRIBOSIDE)	1,3	76-87-9	TRIPHENYLTTIN HYDROXIDE
4	91-79-2	THENYLDIAMINE	1	126-72-7	TRIS (see TRIS(2,3-DIBROMOPROPYL)PHOSPHATE)
4	148-79-8	THIABENDAZOLE	1	38571-73-2	TRIS-1,2,3-(CHLOROMETHOXY)PROPANE
4	148-79-8	2-(4-THIAZOLYL)-BENZIMAZOLE (see THIABENDAZOLE)	1,3	126-72-7	TRIS(2,3-DIBROMOPROPYL)PHOSPHATE
1	52-24-4	THIO-TEPA	3	78-42-2	TRIS(2-ETHYLHEXYL)PHOSPHATE
1	62-55-5	THIOACETAMIDE	1	150-38-9	TRISODIUM ETHYLENEDIAMINETETRAACETATE
1	97-18-7	2,2-THIOBIS(4,6-DICHLOROPHENOL)	1,4	75104-43-7	TRIHYDRATE (see EDTA, TRISODIUM SALT TRIHYDRATE)
1,3	79-19-6	THIOCARBAMYLHYDRAZINE (see THIOSEMICARBAZIDE)	1	72254-58-1	TRP-P-1 ACETATE (see 3-AMINO-1,4-DIMETHYL-5H-PYRIDO[4,3-b]INDOLE ACETATE)
1	115-29-7	THIODAN (see ENDOSULFAN)	3	54-12-6	TRP-P-2 ACETATE (see 3-AMINO-1-METHYL-5H-PYRIDO[4,3-b]INDOLE ACETATE)
			1,2,3	73-22-3	DL-TRYPTOPHAN
					L-TRYPTOPHAN

CHRONOLOGICAL SUPPLEMENT

PLOT	CAS NUMBER	CHEMICAL NAME
1	83-79-4	TUBATOXIN (see ROTENONE)
1	13472-45-2	TUNGSTATE, SODIUM
1,3,4	103-90-2	TYLENOL (see ACETAMINOPHEN)
1	97-74-5	UNADS (see TETRAMETHYLTHIURAM MONOSULFIDE)
1	57-13-6	UREA
1	51-79-6	URETHANE
4	55567-81-2	VALORON (see TILDINE FUMARATE)
1	27774-13-6	VANADYL SULFATE
1	97-18-7	VANCIDE BL (see 2,2-THIOBIS(4,6-DICHLOROPHENOL))
1	6385-58-6	VANCIDE BN (see SODIUM BITHIONOLATE)
1	6379-46-0	VANCIDE PB (see 1,2,3-TRICHLORO-4,6-DINITROBENZENE)
1	mixture	VANGUARD GF
1	13927-77-0	VANGUARD N (see NICKEL DIBUTYLDITHIOCARBAMATE)
1	62-73-7	VAPONA (see DICHLORVOS)
1	865-21-4	VINBLASTINE
3	108-05-4	VINYL ACETATE
1	593-60-2	VINYL BROMIDE
1,2,3,4	75-01-4	VINYL CHLORIDE
4	100-40-3	4-VINYLCYCLOHEXENE
1,2,3,4	75-35-4	VINYLDENE CHLORIDE
1,3	1694-09-3	FD & C VIOLET NO. 1
1	302-79-4	VITAMIN A ACID
3	50-81-7	VITAMIN C (see L-ASCORBIC ACID)
1	50-14-6	VITAMIN D2
3	59-02-9	VITAMIN E (see DL-alpha-TOCOPHERYL ACETATE)
4	mixture	XYLENE MIXTURE (m-XYLENE, o-XYLENE, p-XYLENE)
4	1330-20-7	XYLENE MIXTURE (60% m-XYLENE, 9% o-XYLENE, 14% p-XYLENE, 17% ETHYLBENZENE)
1	21436-96-4	2,4-XYLIDINE.HCl
1	51786-53-9	2,5-XYLIDINE.HCl
2	2832-40-8	C.I. DISPERSE YELLOW 3
1	6358-85-6	C.I. PIGMENT YELLOW 12
1	5979-28-2	C.I. PIGMENT YELLOW 16

PLOT	CAS NUMBER	CHEMICAL NAME
1	5567-15-7	C.I. PIGMENT YELLOW 83
1,2	842-07-9	C.I. SOLVENT YELLOW 14 (see 1-PHENYLAZO-2-NAPHTHOL)
1	128-66-5	C.I. VAT YELLOW 4
1	6358-85-6	DIARYLANILIDE YELLOW (see C.I. PIGMENT YELLOW 12)
1	1934-21-0	FD & C YELLOW NO. 5
1,2	2783-94-0	FD & C YELLOW NO. 6
2	17924-92-4	ZEARALENONE
1	315-18-4	ZECTRAN (see MEXACARBATE)
1	155-04-4	ZETAX (see 2-MERCAPTOBENZOTHIAZOLE, ZINC)
1	136-23-2	ZINC DIBUTYLDITHIOCARBAMATE
1	14324-55-1	ZINC DIETHYLDITHIOCARBAMATE
1,3	137-30-4	ZINC DIMETHYLDITHIOCARBAMATE
1	12122-67-7	ZINC ETHYLENEBISTHIOCARBAMATE
1	12122-67-7	ZINEB (see ZINC ETHYLENEBISTHIOCARBAMATE)
1,3	137-30-4	ZIRAM (see ZINC DIMETHYLDITHIOCARBAMATE)
1	14644-61-2	ZIRCONIUM (IV) SULFATE

CAS NUMBER = Chemical Abstracts Service registry number

PLOT 1 = Gold, L.S., Sawyer, C.B., Magaw, R., Backman, G.M., de Veciana, M., Levinson, R., Hooper, N.K., Havender, W.R., Bernstein, L., Peto, R., Pike, M., and Ames, B.N. A carcinogenic potency database of the standardized results of animal bioassays. Environ. Health Perspect. 58: 9-319 (1984).

PLOT 2 = Gold, L.S., de Veciana, M., Backman, G.M., Magaw, R., Lopipero, P., Smith, M., Blumenthal, M., Levinson, R., Bernstein, L., and Ames, B.N. Chronological supplement to the carcinogenic potency database: standardized results of animal bioassays published through December 1982. Environ. Health Perspect. 67: 161-200 (1986).

PLOT 3 = Gold, L.S., Slone, T.H., Backman, G.M., Magaw, R., Da Costa, M., Lopipero, P., Blumenthal, M. and Ames, B.N. Second Chronological Supplement to the Carcinogenic Potency Database: Standardized Results of Animal Bioassays Published through December 1984 and by the National Toxicology Program through May 1986. Environ. Health Perspect. 74: 237-329 (1987).

PLOT 4 = This publication.